


NORPLAN



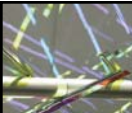
**DATA MANAGEMENT2
MS. ACCESS TRAINING**



Presented By:
Atta Mohammad Mutmaeen

27th Sep to 30th October 2014
Organized By: NORPLAN/MRRD

1

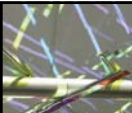


OUTLINES
Microsoft Access Training

- 1) Introduction to Databases
- 2) Introduction to Objects
- 3) Getting Started in Access
- 4) Working with Tables
- 5) Dealing with Existing Database
- 6) Creating a New Database
- 7) Working with Forms
- 8) Sorting and Filtering Records

Data Management 2 MS... Access Training

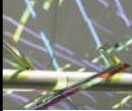
2



**1. INTRODUCTION
TO
DATABASES**

Data Management 2 MS... Access Training

3



1. Introduction to Databases

What is Microsoft Access?

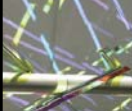
Microsoft Access is a relational database management system (DBMS or RDBMS).

At the very core, it is a software “engine” that provides an interface between physical data and user application queries.

Examples of DBMS

- *Oracle*
- *mySQL*
- *SQL Server (Microsoft)*
- *DB2 (IBM)*
- *Informix*

Data Management 2 MS... Access Training 4



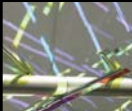
1. Introduction to Databases Cont'd

Why choose MS-Access over MS-Excel?

Although there is always overlap, the following rules might help when deciding when / when not to use **MS Access**:

- ✓ **MS Access** is best used for long-term data storage and/or data sharing.
- ✓ **MS Excel** is best used for minor data collection, manipulation, and especially visualization.
- ✓ It is easy to export data from **MS Access** to **Excel**

Data Management 2 MS... Access Training 5

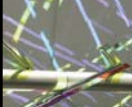


1. Introduction to Databases Cont'd

Why choose MS-Access over other DBMS systems?

- **Microsoft Access** is cheap, readily available (packaged with MS-Office Premium).
- Easy to use (relative to other systems, **Oracle** may require one FTE to maintain the server as a database administrator and another FTE to serve as an application developer).
- Includes front-end tools for rapid application development (RAD). This also makes **MS-Access** a good prototype environment.

Data Management 2 MS... Access Training 6



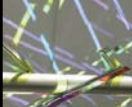
1. Introduction to Databases Cont'd

❑ Why choose other DBMS systems over MS-Access?

MS-Access can handle a large number of records, but is somewhat **slow** compared to some of the high-end platforms.

Multiple users may use the database simultaneously, but **MS-Access** is known to become **unstable** with greater than 3-5 users.

Data Management 2 MS... Access Training 7




1. Introduction to Databases Cont'd

❑ MS-Access

MS-Access is a **database creation and management** program. To understand **MS-Access**, you must first understand **databases**. In this lesson, you will learn:

- About **DATABASE** and how they are used.
- You will familiarize yourself with the differences between data management in **MS.ACCESS** and **Microsoft EXCEL**.
- Finally, you will get a look ahead at the rest of the Access course.

Data Management 2 MS... Access Training 8



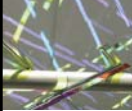
1. Introduction to Databases Cont'd

A DATABASE:
-is an organized collection of data, facts about people, events, things, or ideas related to a specific topic or purpose.

INFORMATION:
-is data that is organized in a useful manner.

DATA:
-are the facts and statistics collected in the raw form for reference or analysis whereas information is processed data.

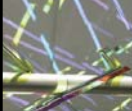
Data Management 2 MS... Access Training 9



1. Introduction to Databases Cont'd

- Access 2007, 2010 and 2013 databases end with **.accdb** file extension – for example, **sales.accdb**
- Databases made in older versions of Access have the file extension **.mdb**

Data Management 2 MS... Access Training MRRD/NORPLAN 10



1. Introduction to Databases Cont'd

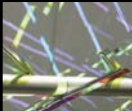
❖ **What is a database?**

- A database is a collection of data that is stored in a computer system.
- Databases allow their users to enter, access, and analyze their data quickly and easily.

Example:


- **doctor's receptionist** entered your personal information into a computer
- Or watched a **store employee** use a computer to see whether an item was in stock?

Data Management 2 MS... Access Training MRRD/NORPLAN 11



1. Introduction to Databases Cont'd

For instance, if you like to bake you might decide to keep a database containing the types of **cookies** you know how to make and the friends you give those **cookies** to. The simplest databases contain two lists: a list of your friends, and a list of cookies.



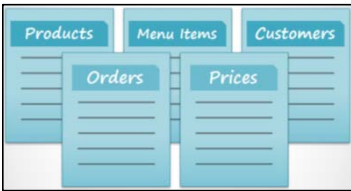
Data Management 2 MS... Access Training MRRD/NORPLAN 12

1. Introduction to Databases Cont'd

If you were a professional baker you would have many more lists to keep track of:

- a list of **customers**,
- a list of **products sold**,
- a list of prices, a list of **orders**

Note:
The more lists you add, the more complex the database will be.



Data Management 2 MS... Access Training MRRD/NORPLAN 13

1. Introduction to Databases Cont'd


MS-Access stores its lists of data in **tables**, which allow you to store even more detailed information. In the table below, the "People" list in the amateur baker's database has been expanded to include other relevant information about the baker's friends.

ID	Name	Cell Phone	Birthday	Nut Allergy?
1	Dad	555-0404	June 3	Yes
2	Aunt Aida	555-9890	July 8	No
3	Joakim	555-0462	September 19	No
4	Dwane	555-9975	January 5	No
5	Allegra	555-0099	January 14	Yes

A relational database is able to understand how lists and the objects within them relate to one another.

Data Management 2 MS... Access Training MRRD/NORPLAN 14

1. Introduction to Databases Cont'd



The simple database with two lists:
names of **your friends**, and the types of **cookies** you know how to make. You decide to create a third list to keep track of the **batches** of cookies you make and who they're for.

Data Management 2 MS... Access Training MRRD/NORPLAN 15

1. Introduction to Databases

Cont'd

The fact that **relational databases** can handle information this way allows you to **enter**, **search**, and **analyze** data in more than one table at a time.

Data Management 2 MS... Access Training MRRD/NORPLAN

16

1. Introduction to Databases

Cont'd

❖ Guidelines for Designing Databases

- Determine the information you want to keep track of to create a new database.
- Ask yourself, "What questions should this database be able to answer for me?"
- The purpose of a database is to store data in a manner that makes it easy for you to get the information you need.

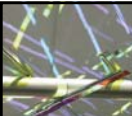
Data Management 2 MS... Access Training MRRD/NORPLAN

17

2. INTRODUCTION TO OBJECTS

Data Management 2 MS... Access Training

18

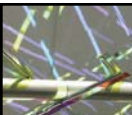


2. Introduction to Objects

Databases in Access are composed of four objects: **tables**, **queries**, **forms**, and **reports**.

Together, these objects allow you to **enter**, **store**, **analyze**, and **compile** your data as you wish.

Data Management 2 MS... Access Training MRRD/NORPLAN 19

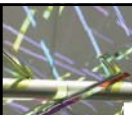


2. Introduction to Objects

Cont'd


- ❑ What is **Field**?
A single characteristic or attribute of a person, place, object, event, or idea.
- ❑ What is **Record**?
A set of related field values.
- ❑ What is **Table**?
A collection of records that identify a category of data, such as Customers, Orders, or Inventory. Store the data in a database – similar to a spreadsheet, but more organized. Contains records (rows) and fields (columns).

Data Management 2 MS... Access Training by MRRD/NORPLAN 20



2. Introduction to Objects

Cont'd



ID	First Name	Last Name	Street Address	City
20	Barbara	Jones	29 North Luke Ct.	Raleigh
29	Bob	Williams	63-C Chapel Ct.	Durham
30	Juanita	Thomas	123 Garden Plow Way	Raleigh
31	Sara	Binder	127 South Peijup Ln.	Raleigh
32	Larry	Ferguson	124 Heuristic Way	Raleigh
33	Samantha	Stone	2380 New Cove Rd.	Garner
34	Jamie	Cheng	131 W Clinton St.	Raleigh
35	Patti	Newton	9 Atlantic Blvd	Raleigh
36	Greg	Allenson	2520 Hopkins Rd.	Raleigh
37	Carol	Altman	3203 Glenwood Ave. E	Raleigh
38	Zoe	Haverford	817 Hillsborough St. A	Raleigh
39	Danny	Aurelio	202 Cedar Ln.	Raleigh
40	Vig	Bergman	53 Pine St.	Raleigh
41	Jeffery	Bittman	1245 Ross Park Dr.	Raleigh
42	William	Draper	1122 Glenwood Ave.	Raleigh
43	Megan	Whitman	311 Cook St.	Raleigh
44	Dick	Jamerson	105 David St.	Raleigh
45	Marjan	Honkins	202 C St. Unit A	Raleigh
46	Colin		131 F. Edenton St.	Raleigh

Data Management 2 MS... Access Training by MRRD/NORPLAN 21

2. Introduction to Objects

Cont'd

Table →

ID	First Name	Last Name	Street Address
67	Joy	Zachman	887 Lee St.
68	Frances	Trenton	901 Kenan Rd.
69	Latavia		Mclver Ct.
70	Kurtis		3 Cobb Rd.
71	Lashaunda		1 Hinton St.
72	Lieselotte		2 Spencer Ave.
73	Sula	Smart	56 Dey Rd.
74	Jude	Smith	929 Greenlaw Dr.
75	Katharine	Kellerman	76 Murphy Ave.
76	Ruiari	O'Brien	100 Aycock St.
77	Tyra	Kirby	8700 Stacey Rd.
78	Michiko	Akiwana	901 Glenwood Ave.
79	Betty	Potter	80 Greene St.
80	Elizabeth	Loges	44 Steven Rd.

Field Names

Data Management 2 MS... Access Training by MRRD/NORPLAN 22

2. Introduction to Objects

Cont'd

○ **Forms, queries, and reports**

Although **tables** store all of your data, the other three objects offer you ways to work with it: **forms, queries, and reports**. Each of these objects interacts with the records stored in your database's tables.

Data Management 2 MS... Access Training by MRRD/NORPLAN 23

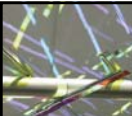
2. Introduction to Objects

Cont'd

□ **What is Form?**

- **Forms** are used for entering data, displaying data or for building a menu system.
 - *Basic Forms,*
 - *Split Forms,*
 - *Multiple Item Forms,*
 - *Sub-forms*

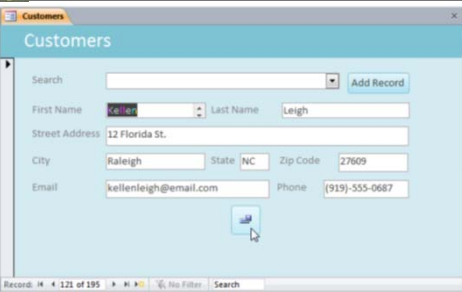
Data Management 2 MS... Access Training by MRRD/NORPLAN 24



2. Introduction to Objects

Cont'd

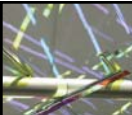
Form →



Records: 11 of 121 of 195

Data Management 2 MS... Access Training by MRRD/NORPLAN

25



2. Introduction to Objects

Cont'd

What is Queries?

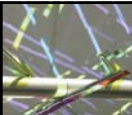
Queries are a way of searching for and compiling data from one or more tables.

When you build a query in Access, you are defining specific search conditions to find exactly the data you want.

- Allow you to ask questions (**queries**) about data in the database to extract information.
- When have customers (**placed orders**)?
- What products in inventory haven't (**sold well**)?

Data Management 2 MS... Access Training by MRRD/NORPLAN

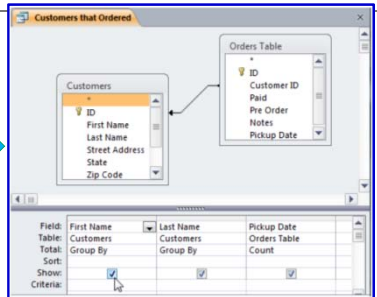
26



2. Introduction to Objects

Cont'd

Query →



Field:	First Name	Last Name	Pickup Date
Table:	Customers	Customers	Orders Table
Total:	Group By	Group By	Count
Sort:			
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:			

Data Management 2 MS... Access Training by MRRD/NORPLAN

27

2. Introduction to Objects Cont'd


What is Report?

- Used to **format** and **present** the data in a professional, logical and useful manner. Often intended for **printing** and distribution. Can be built from **tables** or **queries**.
- Reports (output) in a system dictate what data must be stored in the database.
- Report, Layout and Design view and Print Preview
- Access offers you the ability to create a report from any **table** or **query**.

Data Management 2 MS... Access Training by MRRD/NORPLAN 28

2. Introduction to Objects Cont'd

Report →

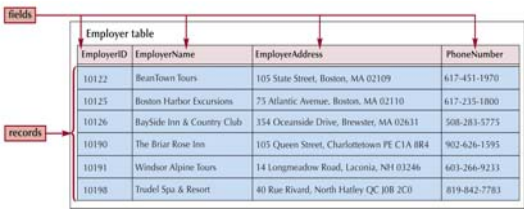


Product Type	Product Name	Quantity
Cakes	Cheesecake	17
Cakes	Buche de Noel (Christmas Cake)- Winter	12
Pies	Pecan	10
Pies	Pumpkin	9
Pies	French Silk	5
Pies	Chocolate Chess	5
Pies	Apple	5

Data Management 2 MS... Access Training by MRRD/NORPLAN 29

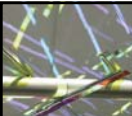
2. Introduction to Objects Cont'd

Illustration of Fields, records and a Table



EmployerID	EmployerName	EmployeeAddress	PhoneNumber
10122	BeanTown Tours	105 State Street, Boston, MA 02109	617-451-1970
10125	Boston Harbor Excursions	75 Atlantic Avenue, Boston, MA 02110	617-235-1800
10126	BaySide Inn & Country Club	354 Occamside Drive, Brewster, MA 02631	508-283-5775
10190	The Briar Rose Inn	105 Queen Street, Charlottetown PE C1A 0R4	902-626-1595
10191	Windsor Alpine Tours	14 Longmeadow Road, Lacombe, NH 03246	603-266-9233
10198	Trudel Spa & Resort	40 Rue Rivard, North Hatley QC J0B 2C0	819-842-7783

Data Management 2 MS... Access Training by MRRD/NORPLAN 30



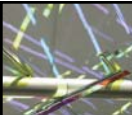
2. Introduction to Objects

Cont'd

Putting it all together

Every piece of data that a *query*, *form*, or *report* uses is stored in one of your database tables.

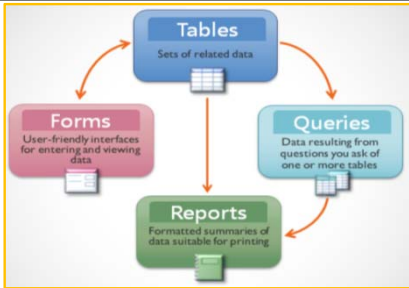
Data Management 2 MS... Access Training by MRRD/NORPLAN 31



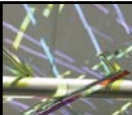
2. Introduction to Objects

Cont'd

Putting it all together



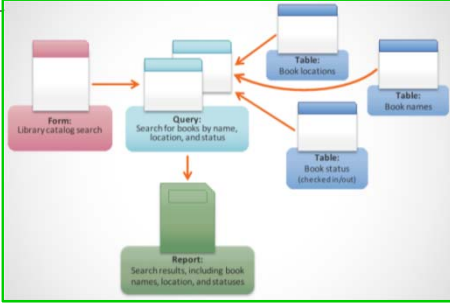
Data Management 2 MS... Access Training by MRRD/NORPLAN 32



2. Introduction to Objects

Cont'd

As an example if you Search for a book at the library?



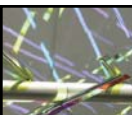
Data Management 2 MS... Access Training by MRRD/NORPLAN 33




3. GETTING STARTED IN ACCESS

Data Management 2 MS... Access Training

34





3. Getting Started in Access



Access 2013

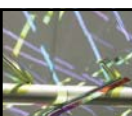
Double click on the **Microsoft Access** icon on the desktop.





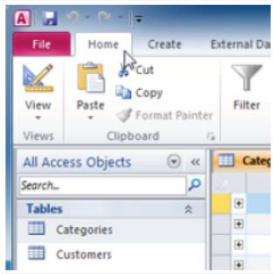
Data Management 2 MS... Access Training by MRRD/NORPLAN

35



3. Getting Started in Access Cont'd

Whenever you're learning a new program, it's important to familiarize yourself with the **program window** and the **tools** within it.



Data Management 2 MS... Access Training by MRRD/NORPLAN


36

3. Getting Started in Access Cont'd

This picture gives you the option to:

1. Create a New Database from scratch
2. Use the wizard to create a New Database
3. Open an existing database

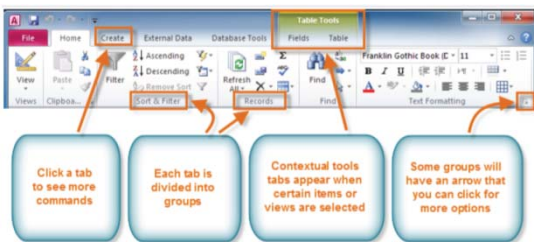
The white box gives you the most recent databases you have used. If you do not see the one you had created, choose the More Files option and hit OK. Otherwise choose the database you had previously used and click OK.



Data Management 2 MS... Access Training by MRRD/NORPLAN 37

3. Getting Started in Access Cont'd

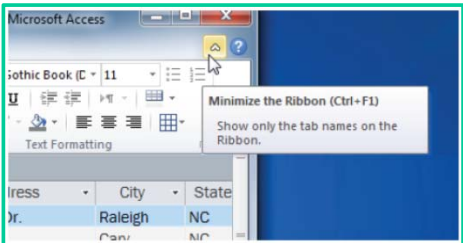
Working with your Access environment (The Ribbon):



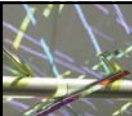
Data Management 2 MS... Access Training by MRRD/NORPLAN 38

3. Getting Started in Access Cont'd

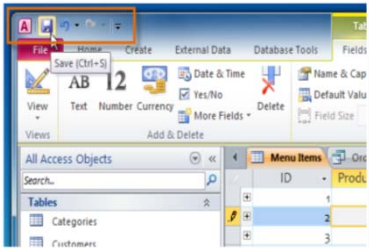
To minimize and maximize the Ribbon:



Data Management 2 MS... Access Training by MRRD/NORPLAN 39



3. Getting Started in Access Cont'd

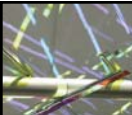


The Quick Access Toolbar

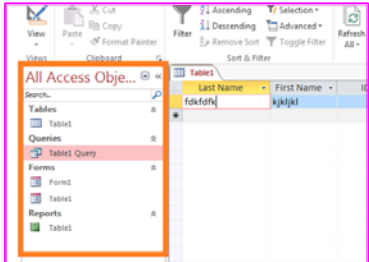
The Quick Access Toolbar is located above the Ribbon. By default, it shows the Save, Undo, and Repeat commands.

Data Management 2 MS... Access Training by MRRD/NORPLAN

40



3. Getting Started in Access Cont'd

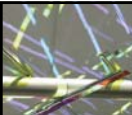


The Navigation Pane

The Navigation Pane is a list containing every object in your database. For easier viewing, the objects are organized into groups by type. You can open, rename, and delete objects using the Navigation Pane.

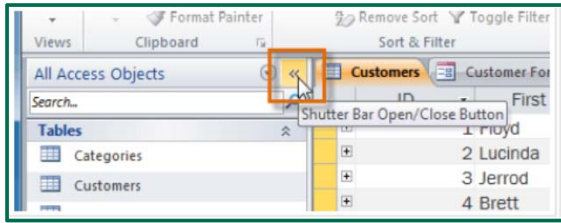
Data Management 2 MS... Access Training by MRRD/NORPLAN

41



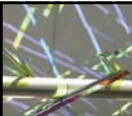
3. Getting Started in Access Cont'd

To minimize and Maximize the Navigation Pane:



Data Management 2 MS... Access Training by MRRD/NORPLAN

42



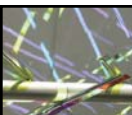
3. Getting Started in Access Cont'd

Databases with navigation forms

Some databases include a **navigation form** that opens automatically when the database is opened. **Navigation forms** are **designed** to be a user-friendly replacement for the Navigation Pane.

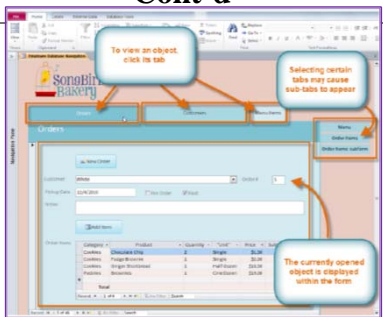
Data Management 2 MS... Access Training by MRRD/NORPLAN

43



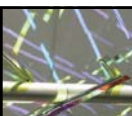
3. Getting Started in Access Cont'd

Navigation Form



Data Management 2 MS... Access Training by MRRD/NORPLAN

44



4. WORKING WITH TABLES


Data Management 2 MS... Access Training

45

4. Working with Tables

Table basics

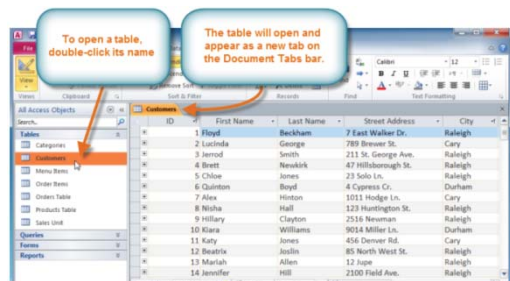
If you're new to Microsoft Access, you'll need to learn the basics of working with tables so you can open, navigate, add information, and edit them.

1. Open your database, and locate the Navigation Pane.
2. In the Navigation Pane, locate the table you would like to open. Tables are marked with the  icon.
3. Double-click the name of the table. It will open and appear as a tab in the Document Tabs bar.

Data Management 2 MS... Access Training by MRRD/NORPLAN

46

4. Working with Tables Cont'd

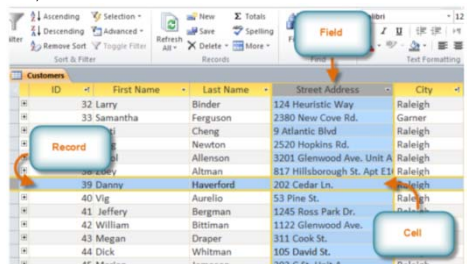


Data Management 2 MS... Access Training by MRRD/NORPLAN

47

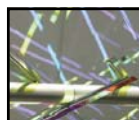
4. Working with Tables Cont'd

In Access, **rows** and **columns** are referred to as **records** and **fields**



Data Management 2 MS... Access Training by MRRD/NORPLAN

48



4. Working with Tables Cont'd

A **field** is a way of organizing information by type. Think of the **field** name as a question, and every cell within that field as a **response** to that question.

ID	First Name	Last Name	Street Address
67	Joy	Zachman	877 Lee St.
68	Frances	Trenton	901 Kenan Rd.
69	Latavia		McIver Ct.
70	Kurtis		Cobb Rd.
71	Lashaunda		Hinton St.
72	Lieselotte		Spencer Ave.
73	Sula	Smart	56 Dey Rd.
74	Jude	Smith	929 Greenlaw Dr.
75	Katharine	Kellerman	76 Murphy Ave.
76	Ruiari	O'Brien	100 Aycock St.
77	Tyra	Kirby	8700 Stacey Rd.
78	Michiko	Akiwana	901 Glenwood Ave.
79	Betty	Potter	80 Greene St.
80	Elizabeth	Loges	44 Steven Rd.

Data Management 2 MS... Access Training by MRRD/NORPLAN

49



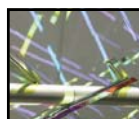
4. Working with Tables Cont'd

A **record** is one unit of information. Each **record** has its own **ID number**. **ID number** is unique to its record. The **ID number** for a record cannot be changed.

ID	First Name	Last Name	Street Address	City
84	Magda	Sumner	98 Tyler St.	Raleigh
85	Peggy	Moss	1130 Jackson St.	Raleigh
94	Wade		532 Chronicle Way	Raleigh
95	Florent	Marais	53 Ada St.	Raleigh
96	Erwan	Hausman	918 Lonesome Dove R.	Raleigh
97	Rodrigue	Sterling	49 Mockingbird Way	Raleigh
102	Theodore	Achi	120 Baker St.	Raleigh
105	Dwyane	James	4221 Basil Ct.	Cary

Data Management 2 MS... Access Training by MRRD/NORPLAN

50



4. Working with Tables Cont'd

Navigating within tables

To navigate through records in a table, you can use the **up** and **down arrow keys**, scroll **up** and **down**, or use the **arrows** in the record navigation bar located at the bottom of your table.

You can also find any record in the currently open table by **searching** for it using the record search box. Simply place your cursor in the **search box**, type any word that appears in the record you would like to find, and press Enter.

Data Management 2 MS... Access Training by MRRD/NORPLAN

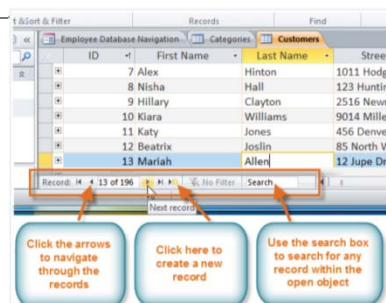
51

4. Working with Tables Cont'd

Navigating within tables Cont'd

To view additional records that match your search, **press Enter** again.

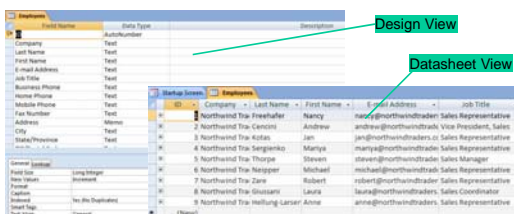
To navigate between fields, you can use the **left and right** arrow keys or scroll left and right.



Data Management 2 MS... Access Training by MRRD/NORPLAN

52

4. Working with Tables Cont'd



- Datasheet View – used to add, modify, delete and view records
- Design View – used to create and modify the fields in a table

Data Management 2 MS... Access Training by MRRD/NORPLAN

53

4. Working with Tables Cont'd

Primary key field

Navigation bar

Navigation buttons

Scroll bar

Datasheet
View
of Table

- Primary Key – a field that identifies each record as being unique.

Data Management 2 MS... Access Training by MRRD/NORPLAN

54

4. Working with Tables

Cont'd
Key symbol identifies primary key field

- Click F6 to switch between the upper and lower panes

Set field properties in the lower pane

Design View of Table

Data Management 2 MS... Access Training by MRRD/NORPLAN

4. Working with Tables

Cont'd

Report

Query

Form

- Forms, queries, and reports are all based upon data contained in a table

Data Management 2 MS... Access Training by MRRD/NORPLAN

4. Working with Tables

Cont'd

To add a new record:
There are three ways to add a new record to a table:

I. In the Records group on the Home tab, click the New command.

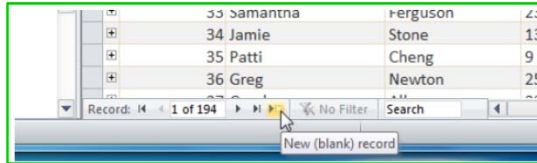
Records: 14 of 176

Data Management 2 MS... Access Training by MRRD/NORPLAN

4. Working with Tables Cont'd

To add a new record Cont'd:

- II. On the Record Navigation bar at the bottom of the window, click the New Record button.



Data Management 2 MS... Access Training by MRRD/NORPLAN

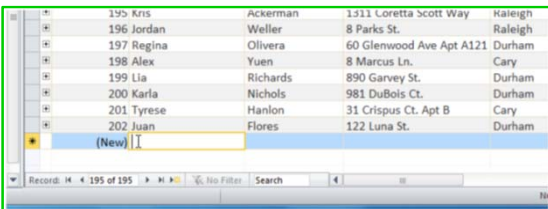
58

4. Working with Tables

Cont'd

To add a new record Cont'd:

- III. Simply begin typing in the row below your last added record.



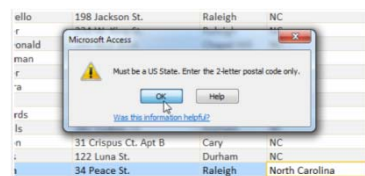
Data Management 2 MS... Access Training by MRRD/NORPLAN

59

4. Working with Tables

Cont'd

To add a new record Cont'd:



Occasionally when you enter information into a record, a window will **pop up** to tell you the information you've entered is invalid. Click **OK**, then follow the instructions in the pop-up window to re-enter your data.

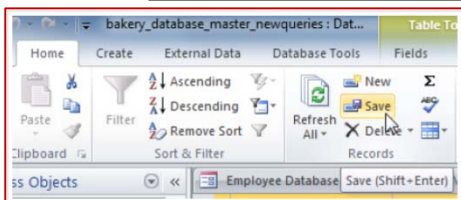
Data Management 2 MS... Access Training by MRRD/NORPLAN

60

4. Working with Tables Cont'd

To save a record:

- Select the Home tab, and locate the Records group.
- Click the **Save** command



Note: Be sure to save any unsaved records before closing a table. Access will not prompt you to save them when you close the table.

Data Management 2 MS... Access Training by MRRD/NORPLAN

61

4. Working with Tables Cont'd

To edit a record :

➤ Editing records

To quickly edit any record within a table, simply **click on it** and type in your changes. However, **Access** also offers you the ability to **find** and **replace** a word within multiple records and to delete records entirely.

Data Management 2 MS... Access Training by MRRD/NORPLAN

62

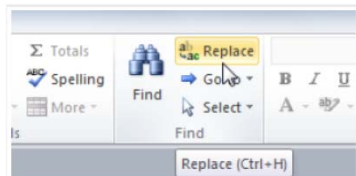
4. Working with Tables Cont'd

To edit a record :Cont'd:

➤ To replace a word within a record:

You can edit multiple occurrences of the same word by using **Find** and **Replace**, which searches for a term and replaces it with another term.

- I. Select the Home tab, and locate the Find group.
- II. Select the Replace command. The Find and Replace dialog box will appear.



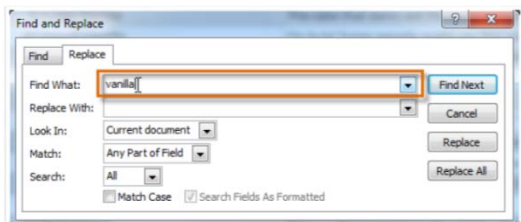
Data Management 2 MS... Access Training by MRRD/NORPLAN

63

4. Working with Tables Cont'd

To edit a record: Cont'd:

Click the **Find What:** box, and type the word you would like to find.

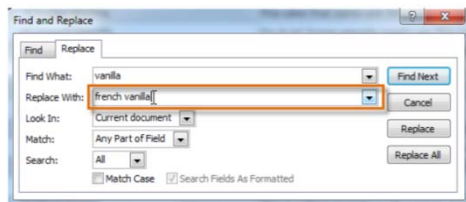


Data Management 2 MS... Access Training by MRRD/NORPLAN

64

4. Working with Tables Cont'd

To edit a record: Cont'd:



Click the **Replace With:** box, and type the word you would like to replace the original word.

Data Management 2 MS... Access Training by MRRD/NORPLAN

65

4. Working with Tables Cont'd

To Delete a Record:

- Once records have been added to a table, they can be deleted or modified:
 - In Datasheet view, click the row selector for the record(s) you want to delete and then click the Delete Record button on the toolbar
- To change or modify a record:
 - Place your cursor on the record and then on the field you want to change
 - You can then edit the field's value as you wish by typing in new data
- You can switch from navigation mode to editing mode depending on what you want to do at the time.
 - When you are editing a record, you are in editing mode. Otherwise you are in navigation mode
 - Editing mode is indicated by a pencil symbol in the left margin of the datasheet view

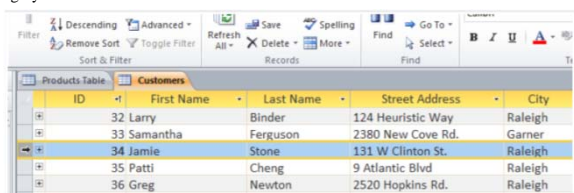
Data Management 2 MS... Access Training by MRRD/NORPLAN

66

4. Working with Tables Cont'd

Select the entire record by clicking the gray border at the left side of the record.

To Delete a Record Cont'd:



ID	First Name	Last Name	Street Address	City
32	Larry	Binder	124 Heuristic Way	Raleigh
33	Samantha	Ferguson	2380 New Cove Rd.	Garner
34	Jamie	Stone	131 W Clinton St.	Raleigh
35	Patti	Cheng	9 Atlantic Blvd	Raleigh
36	Greg	Newton	2520 Hopkins Rd.	Raleigh

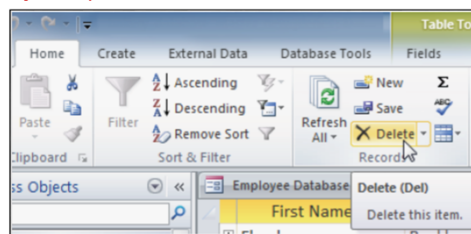
Data Management 2 MS... Access Training by MRRD/NORPLAN

67

4. Working with Tables Cont'd

- Select the Home tab, and locate the Records group.
- Click the Delete command. The record will be permanently deleted.

To Delete a Record Cont'd:



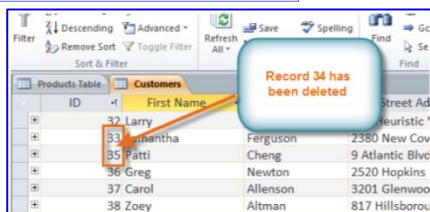
Data Management 2 MS... Access Training by MRRD/NORPLAN

68

4. Working with Tables Cont'd

The ID numbers assigned to records stay the same even after you delete a record. For example, if you delete the 34th record in a table, the sequence of record ID numbers will read "...32, 33, 35, 36..." rather than "...32, 33, 34, 35, 36..."

To Delete a Record Cont'd:



ID	First Name	Last Name	Street Address	City
32	Larry	Binder	124 Heuristic Way	Raleigh
33	Samantha	Ferguson	2380 New Cove Rd.	Garner
35	Patti	Cheng	9 Atlantic Blvd	Raleigh
36	Greg	Newton	2520 Hopkins Rd.	Raleigh
37	Carol	Allenson	3201 Glenwood	Raleigh
38	Zoey	Altman	817 Hillsboro Rd.	Raleigh

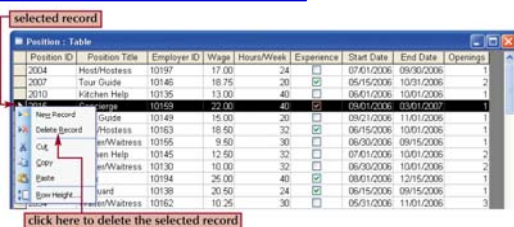
Data Management 2 MS... Access Training by MRRD/NORPLAN

69

4. Working with Tables Cont'd

To Delete a Record Cont'd:

➤ An alternate method for deleting a record



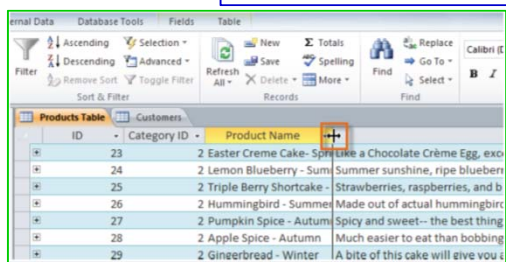
Data Management 2 MS... Access Training by MRRD/NORPLAN

70

4. Working with Tables Cont'd

Resizing Fields and Rows:

➤ To resize a field: Place your cursor over the right gridline in the field title. Your mouse will become a double arrow

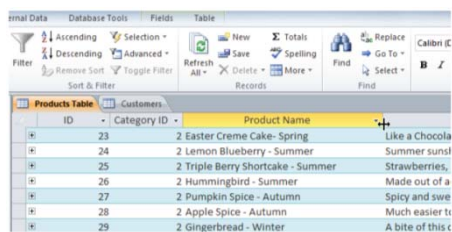


Data Management 2 MS... Access Training by MRRD/NORPLAN

71

4. Working with Tables Cont'd

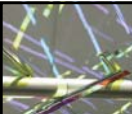
Resizing Fields and Rows Cont'd:



➤ Click and drag the gridline to the right to increase the field width or to the left to decrease the field width. Release the mouse. The field width will be changed.

Data Management 2 MS... Access Training by MRRD/NORPLAN

72



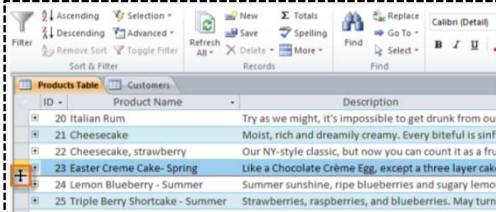
4. Working with Tables

Cont'd

Resizing Fields and Rows Cont'd:

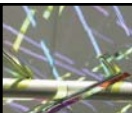
➤ Place your cursor over the bottom gridline in the gray area to the left of the row. Your mouse will become a double arrow.

Click and drag the gridline downward to increase the row height or upward to decrease the row height. Release the mouse. The row height will be changed.



Data Management 2 MS... Access Training by MRRD/NORPLAN

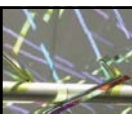
73



5. DEALING WITH EXISTING DATABASE

Data Management 2 MS... Access Training by MRRD/NORPLAN

74



5. Dealing with Existing Database

▪ Dealing with existing Database

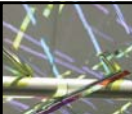
➤ You will deal with an existing database in this section first.

➤ You are not required to create a new database file at first.

➤ You will be provided with a prepared database file.

Data Management 2 MS... Access Training by MRRD/NORPLAN

75



5. Dealing with Existing Database Cont'd

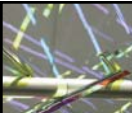
▪ **Dealing with existing Database Cont'd** (*open an existing Database*):

- When **Access** is launched you will see the **Access window**, with the task pane on the right side
- From the task pane you can open an existing database by:
 - Selecting the database you want from the list of **Recently opened databases**
 - Selecting “**Look in**” list arrow to choose a database you want to open from a storage location

If you choose the Look in list arrow, you will browse to the correct location of your database, click on it, and then click on Open to open the database

Data Management 2 MS... Access Training by MRRD/NORPLAN

76



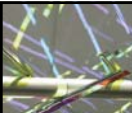
5. Dealing with Existing Database Cont'd

▪ **Dealing with existing Database Cont'd** (*The MS-Access Window*):

- When a database is opened, the Access window and the Database window will be displayed.
- The Access window contains a menu bar, a toolbar, a task pane, and a status bar.
- In the Access window, use the task pane to create a new database or to open an existing database.
 - To create a new database, make a selection from the New section of the task pane
 - To open an existing database, select from the list of Recently opened databases or from the More files option

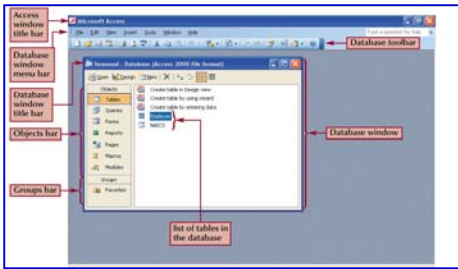
Data Management 2 MS... Access Training by MRRD/NORPLAN

77



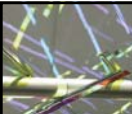
5. Dealing with Existing Database Cont'd

▪ **Dealing with existing Database Cont'd** (*The Ms-Access Window*):



Data Management 2 MS... Access Training by MRRD/NORPLAN

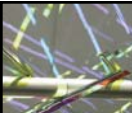
78



5. Dealing with Existing Database Cont'd

- **Dealing with existing Database Cont'd** (*The Database Window*):
 - The Database window is the main control center for working with an Access database.
 - The Database window contains a menu bar, an objects bar, and a groups bar.
 - The Objects bar lists all the objects available in the database
 - The list of objects consists of tables, queries, forms, reports, pages, macros, and modules
 - You can click on any of the objects in the Objects bar to obtain a list of objects of that type

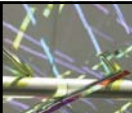
Data Management 2 MS... Access Training by MRRD/NORPLAN 79



5. Dealing with Existing Database Cont'd

- **Dealing with existing Database Cont'd** (*Open an Access database table*):
 - To open a **table** you must first open a **database**:
 - In the database window, select **Tables** on the **objects bar**
 - In the list of tables, select the table you want to open and click on the **Open button**
 - When a table is open it is in **Datasheet view**, which shows the table's data as a collection of rows and columns
 - Each row in the Datasheet view represents a **record** in the table

Data Management 2 MS... Access Training by MRRD/NORPLAN 80



5. Dealing with Existing Database Cont'd

- **Dealing with existing Database Cont'd** (*Navigate a database table*):
 - You can **navigate** through the records by using the navigation buttons displayed at the bottom of the Datasheet view window.
 - The navigation bar allows you to:
 - Go to the first record in the table
 - Go to the previous record in the table
 - Go to the next record in the table
 - Go to the last record in the table
 - Create a new record for the table (sometimes called an append record)

Data Management 2 MS... Access Training by MRRD/NORPLAN 81

5. Dealing with Existing Database Cont'd

■ Dealing with existing Database Cont'd (A Table in datasheet view):

Data Management 2 MS... Access Training by MRRD/NORPLAN

82

5. Dealing with Existing Database Cont'd

■ Dealing with existing Database Cont'd
(The Navigation bar buttons):

Navigation Button	Record Selected	Navigation Button	Record Selected
First record	1	Last record	10
Previous record	2	New record	
Next record	3		

Data Management 2 MS... Access Training by MRRD/NORPLAN

83

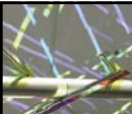
5. Dealing with Existing Database Cont'd

■ Dealing with existing Database Cont'd
(Learn how Ms-Access saves a database):

- The **Save** button in Access differs from the Save button in other Windows programs.
- When you press the **Save button** in Access, you are saving the design of the Access objects and NOT the **data itself**.
 - Access saves data as it is entered
- For this reason, the location at which you are storing your database must always be accessible while working with a particular database.
 - If the database is located on a diskette, the diskette must be in the diskette drive at all times while working with this particular database

Data Management 2 MS... Access Training by MRRD/NORPLAN

84



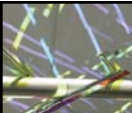
5. Dealing with Existing Database Cont'd

■ Dealing with existing Database Cont'd (*Ms-Access Field Types*):

Data Type	Description	Field Size
Text	Allows field values containing letters, digits, spaces, and special characters. Use for names, addresses, descriptions, and fields containing digits that are not used in calculations.	0 to 255 characters; 50 characters default
Memo	Allows field values containing letters, digits, spaces, and special characters. Use for long comments and explanations.	1 to 65,535 characters; exact size is determined by entry
Number	Allows positive and negative numbers as field values. Numbers can contain digits, a decimal point, commas, a plus sign, and a minus sign. Use for fields that you will use in calculations, except calculations involving money.	1 to 15 digits
Date/Time	Allows field values containing valid dates and times from January 1, 100 to December 31, 9999. Dates can be entered in mm/dd/yy (month, day, year) format, several other date formats, or a variety of time formats, such as 10:35 PM. You can perform calculations on dates and times, and you can sort them. For example, you can determine the number of days between two dates.	8 bytes
Currency	Allows field values similar to those for the number data type. Unlike calculations with number data type decimal values, calculations performed using the currency data type are not subject to round-off error.	Accurate to 15 digits on the left side of the decimal separator and to 4 digits on the right side

Data Management 2 MS... Access Training by MRRD/NORPLAN

85



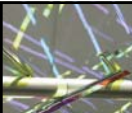
5. Dealing with Existing Database Cont'd

■ Dealing with existing Database Cont'd (*Ms-Access Field Types*):

AutoNumber	Consists of integers with values controlled by Access. Access automatically inserts a value in the field as each new record is created. You can specify sequential numbering or random numbering, which guarantees a unique field value, so that such a field can serve as a table's primary key.	9 digits
Yes/No	Limits field values to yes and no, on and off, or true and false. Use for fields that indicate the presence or absence of a condition, such as whether an order has been filled or whether an employee is eligible for the company dental plan.	1 character
OLE Object	Allows field values that are created in other programs as objects, such as photographs, video images, graphics, drawings, sound recordings, voice-mail messages, spreadsheets, and word-processing documents. These objects can be linked or embedded.	1 gigabyte maximum; exact size depends on object size
Hyperlink	Consists of text used as a hyperlink address. A hyperlink address can have up to three parts: the text that appears in a field or control, the path to a file or page, and a location within the file or page. Hyperlinks help you to connect your application easily to the Internet or an intranet.	Up to 64,000 characters total for the three parts of a hyperlink data type
Lookup Wizard	Creates a field that lets you look up a value in another table or in a predefined list of values.	Same size as the primary key field used to perform the lookup

Data Management 2 MS... Access Training by MRRD/NORPLAN

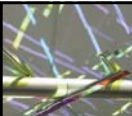
86



6. CREATING NEW DATABASE

Data Management 2 MS... Access Training by MRRD/NORPLAN

87

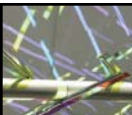


6. Creating New Database

- You can create a new database by using a **Database Wizard** or by creating a new, blank database.
- When you create a new database, you will need to create all the tables, queries, forms, and reports for the database.
 - This is the most flexible approach, since you will create all objects yourself

Data Management 2 MS... Access Training by MRRD/NORPLAN

88



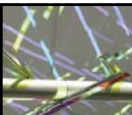
6. Creating New Database Cont'd

☐ Create a database without using the Database Wizard

- To create a new, blank database without using the Database Wizard:
 - ❖ Start Access
 - ❖ Click Blank Database in the task pane
 - ❖ In the dialog box, navigate to the location where you will save your database
 - ❖ Enter the name of the database in the File name text box
 - ❖ Click the Create button


Data Management 2 MS... Access Training by MRRD/NORPLAN

89



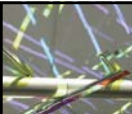
6. Creating New Database Cont'd

☐ Create a new table



Data Management 2 MS... Access Training by MRRD/NORPLAN

90



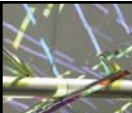
6. Creating New Database Cont'd

❑ Define fields, and specify Table's primary key

- When you create a table, you name the fields and define the properties for the fields.
 - The table structure is set up and modified in Design View
 - In Design View, you will define each field that will be included in the table
- When all the fields have been defined, you will then specify which field(s) will be the primary key.
 - The primary key is not mandatory, but it is a good idea to assign one

Data Management 2 MS... Access Training by MRRD/NORPLAN

91



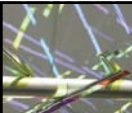
6. Creating New Database Cont'd

❑ Client's Data requirements and Determining Database Fields

EmployerID	ContactFirstName
PositionID	ContactLastName
PositionTitle	Position
EmployerName	Wage
Address	HoursPerWeek
City	NAICSCode
StateProv	NAICSDesc
PostalCode	StartDate
Country	EndDate
Phone	ReferredBy
Openings	Website

Data Management 2 MS... Access Training by MRRD/NORPLAN

92



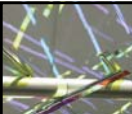
6. Creating New Database Cont'd

❑ Fields grouped into tables

Employer table	NAICS table	Position table
EmployerID	NAICSCode	PositionID
EmployerName	NAICSDesc	PositionTitle
Address		Wage
City		HoursPerWeek
StateProv		Openings
PostalCode		ReferredBy
Country		StartDate
ContactFirstName		EndDate
ContactLastName		
Position		
Phone		
Website		

Data Management 2 MS... Access Training by MRRD/NORPLAN

93



6. Creating New Database Cont'd

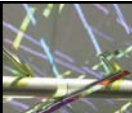
➤ **Create Tables:**

There are several ways to create a table, the following are two ways to do that.

- ❖ Create Table in Design View
- ❖ Create Table in DataSheet View

Data Management 2 MS... Access Training by MRRD/NORPLAN

94



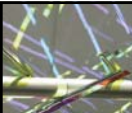
6. Creating New Database Cont'd

➤ **Create Tables Cont'd (choose a primary key):**

- Choose a field or fields to serve as the primary key for the table.
- A primary key must uniquely identify each record in the table.
- Primary keys can consist of more than one field.
- Primary keys with more than one field are called composite keys

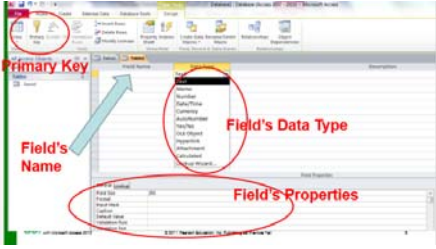
Data Management 2 MS... Access Training by MRRD/NORPLAN

95



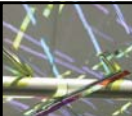
6. Creating New Database Cont'd

➤ **Create Tables Cont'd (create tables in Design View):**



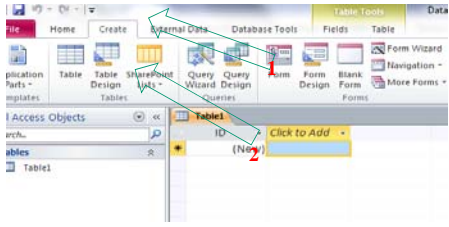
Data Management 2 MS... Access Training by MRRD/NORPLAN

96



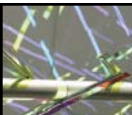
6. Creating New Database Cont'd

➤ **Create Tables Cont'd** (*create tables in Design View*):



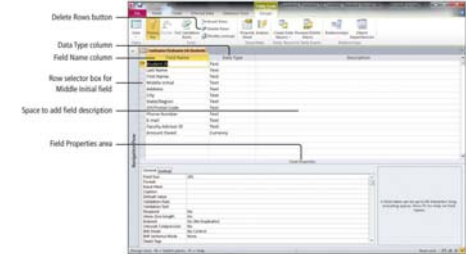
Data Management 2 MS... Access Training by MRRD/NORPLAN

97



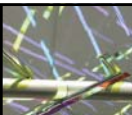
6. Creating New Database Cont'd

➤ **Create Tables Cont'd** (*filling field's information*):




Data Management 2 MS... Access Training by MRRD/NORPLAN

98



6. Creating New Database Cont'd

➤ **Create Tables Cont'd:** After you fill the fields' information, it is the time to give your table a name.
Click the **x** in the corner.



Data Management 2 MS... Access Training by MRRD/NORPLAN

99

6. Creating New Database Cont'd

➤ Create Tables Cont'd (the Database Design View Window):

Data Management 2 MS... Access Training by MRRD/NORPLAN

100

6. Creating New Database Cont'd

➤ Create Tables Cont'd (choosing a primary key):

Data Management 2 MS... Access Training by MRRD/NORPLAN

101

6. Creating New Database Cont'd

➤ Create Tables Cont'd (Datasheet view with 2 records added):

Data Management 2 MS... Access Training by MRRD/NORPLAN

102

6. Creating New Database Cont'd

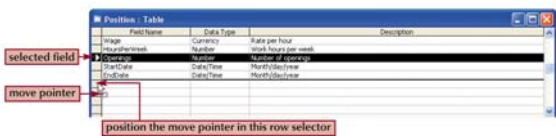
➤ **Create Tables Cont'd**
(*modify the structure of a table by deleting, moving, and adding fields*):

- The structure of a **table** can be modified after it has been created.
- To **delete** a field, enter **Design View**, right-click on the field, and then click Delete Rows on the drop down menu.
- To **move a field**, (you also do this in Design View) click on the field you want to move, and while holding your mouse button down, move the field to the desired location.
- To **add a field** in Design View, right-click the field where you want to insert the new field and then click Insert Rows on the dropdown menu.

Data Management 2 MS... Access Training by MRRD/NORPLAN 103

6. Creating New Database Cont'd

➤ **Create Tables Cont'd** (*moving a field in Design View*):




Data Management 2 MS... Access Training by MRRD/NORPLAN 104

6. Creating New Database Cont'd

➤ **Create Tables Cont'd** (*adding a new field in Design View*):

- Right-click the row selector for the field you want to insert the new field in front of Start Date in this figure.
- Select Insert Rows from the shortcut menu, and a new, blank row will be inserted before the row you selected, as shown below.
- Enter the information for the new field.



Data Management 2 MS... Access Training by MRRD/NORPLAN 105

6. Creating New Database Cont'd

➤ **Create Tables Cont'd** (*change field properties in Design View*):

- You can make additional modifications to the structure of a table by changing the properties of the table's fields.
 - For example, if you have a field that represents a currency value but you do not want to display dollar signs, you could change the format to a standard format
 - In the Design View, you will find a list of all formats available to you. You can make a selection from the list of options
 - Each data type has a separate set of options available in the Field Properties portion of the Table Design Window

106

6. Creating New Database Cont'd

➤ **Create Tables Cont'd** (*changing field properties in Design View*):

Field properties are changed in the Design View window.

107

6. Creating New Database Cont'd

➤ **Create Tables Cont'd** (*Some useful Data Type information*):

Byte	0 TO 255	No fractions, no decimals, no negative numbers, data is rounded
Integer	-/+32766	no fractions, data is rounded
Long Integer	-/+2147483648	no fractions, data is rounded
Single	-/+ 3.4x10 ³⁸	up to seven decimal places
Double	-/+ 1.797x10 ³⁰⁸	up to fifteen decimal places, the largest field size
Replication ID	Globally unique identifier	no decimal places available

108

6. Creating New Database Cont'd

➤ **Create Tables Cont'd** (*copy records from another Access database*):

- If the data you want in your database already exists in **another Access database**, you can copy the records from that database into your database.
- You can use **cut** and **paste** to do this:
 - Open the database that contains the records you want to copy
 - Select the records you want to copy and then press the Copy button. This places the records onto the Windows clipboard
 - Open the database to which you want to copy the records and open the desired table to receive the copied records
 - Place your cursor on the next available row in the table and press the Paste button

Data Management 2 MS... Access Training by MRRD/NORPLAN 109

6. Creating New Database Cont'd

➤ **Create Tables Cont'd** (*import a table from another Access database*):

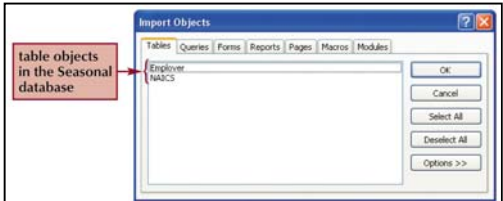
- You can also import an entire table, including its structure, into another database.
- To import a database table:
 - Click the File menu
 - Point to Get External Data, and then Import
 - Locate and select the database and the table you want to import
- This differs from the cut and paste method because you actually import the entire table, its structure, and its data.

Data Management 2 MS... Access Training by MRRD/NORPLAN 110

6. Creating New Database Cont'd

➤ **Create Tables Cont'd** (*import a table from another Access database*):

The Import Objects dialog box



Data Management 2 MS... Access Training by MRRD/NORPLAN 111

6. Creating New Database

Cont'd

➤ **Create Tables Cont'd** (*copy and import considerations*):

- If you choose to copy records from one table to another, it is very important that you first determine that the two tables have the exact same data structure.
 - If the two data structures differ in any way, the copy will cause an error
- When you import, you are importing an entire table, including its data and its structure.
 - This is a good way to include a table in your database that was previously designed in a different database

Data Management 2 MS... Access Training by MRRD/NORPLAN

112

Create Tables in Data Sheet View

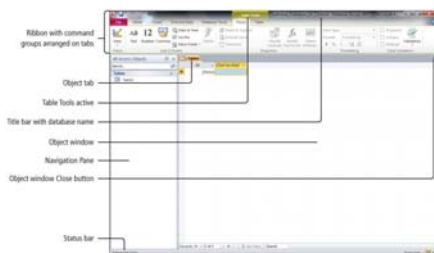
Data Management 2 MS... Access Training by MRRD/NORPLAN

113

6. Creating New Database

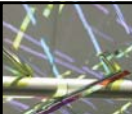
Cont'd

➤ **Create Tables by Datasheet View:**



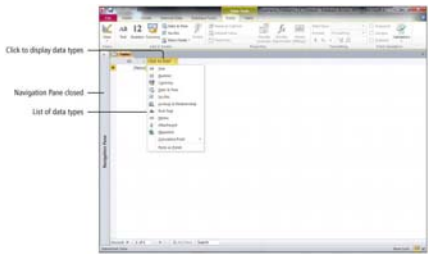
Data Management 2 MS... Access Training by MRRD/NORPLAN

114



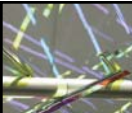
6. Creating New Database Cont'd

➤ Create Tables by Datasheet View Cont'd:



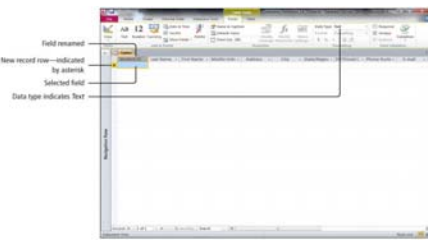
Data Management 2 MS... Access Training by MRRD/NORPLAN

115



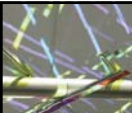
6. Creating New Database Cont'd

➤ Create Tables by Datasheet View Cont'd
(renaming fields and changing data types):

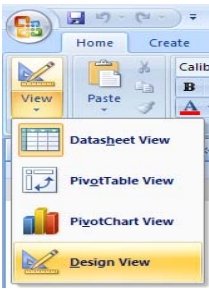


Data Management 2 MS... Access Training by MRRD/NORPLAN

116



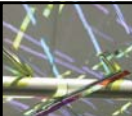
6. Creating New Database Cont'd



➤ Create Tables by Datasheet View Cont'd
(switch between different modes):

Data Management 2 MS... Access Training by MRRD/NORPLAN

117



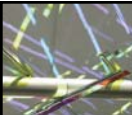
6. Creating New Database Cont'd

➤ Some-keystroke techniques for navigation and editing modes:

Press	To Move the Selection in Navigation Mode	To Move the Insertion Point in Editing Mode
←	Left one field value at a time	Left one character at a time
→	Right one field value at a time	Right one character at a time
Home	Left to the first field value in the record	To the left of the first character in the field value
End	Right to the last field value in the record	To the right of the last character in the field value
↑ or ↓	Up or down one record at a time	Up or down one record at a time and switch to navigation mode
Tab or Enter	Right one field value at a time	Right one field value at a time and switch to navigation mode
Ctrl+Home	To the first field value in the first record	To the left of the first character in the field value
Ctrl+End	To the last field value in the last record	To the right of the last character in the field value


Data Management 2 MS... Access Training by MRRD/NORPLAN

118



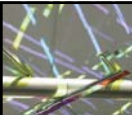
6. Creating New Database Cont'd

➤ Relationship between Tables:



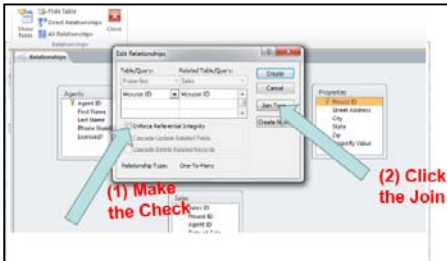
Data Management 2 MS... Access Training by MRRD/NORPLAN

119



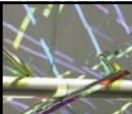
6. Creating New Database Cont'd

➤ Relationship between Tables Cont'd :



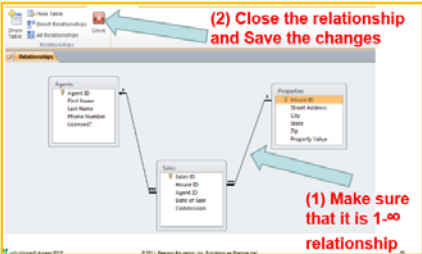
Data Management 2 MS... Access Training by MRRD/NORPLAN

120



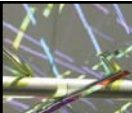
6. Creating New Database Cont'd

➤ Relationship between Tables Cont'd (after creating the relationship) :




Data Management 2 MS... Access Training by MRRD/NORPLAN

121

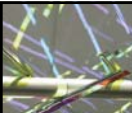


7. WORKING WITH FORMS



Data Management 2 MS... Access Training by MRRD/NORPLAN

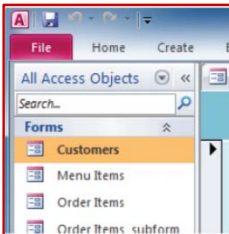
122



7. Working with Forms

❖ Introduction to Forms:

While you can always enter data directly into database tables, you might find it easier to use forms. Using a form to enter data lets you be certain that you're entering the right data in the right location and format.



Data Management 2 MS... Access Training by MRRD/NORPLAN

123

7. Working with Forms

Cont'd

❖ Why use Forms?:



Many of us fill out forms.

- Forms are so popular because they are useful for both the person asking for the information and the person providing it.
- They are a way of requiring information in a specific format, which means the person filling out the form knows exactly which information to include and where to put it.


Data Management 2 MS... Access Training by MRRD/NORPLAN

124

7. Working with Forms

Cont'd

❖ To open an existing form:

- Locate Navigation Pane.
- In the Navigation Pane, locate the form you would like to open.
- Forms are marked with the  icon.
- Double-click



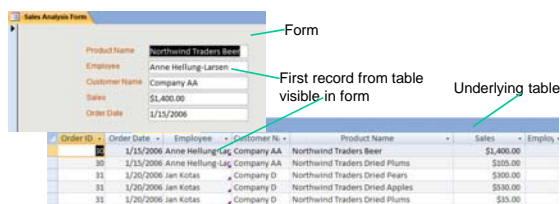
Data Management 2 MS... Access Training by MRRD/NORPLAN

125

7. Working with Forms

Cont'd

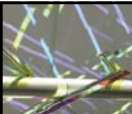
❖ Form vs. Datasheet View:



- Forms allow us to create an interface that can be more user friendly and attractive than Datasheet View.

Data Management 2 MS... Access Training by MRRD/NORPLAN

126

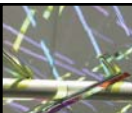


7. Working with Forms Cont'd

❖ **Creating Form:**

- A **form** allows you to view your data one record at a time.
- Forms are useful for maintaining, viewing, and printing records in a database.
- You can create your own form in the **Forms Design** window or you can use the **Forms Wizard** to create a form.
- The easiest way to create a form is to use the **AutoForm Wizard**.

Data Management 2 MS... Access Training by MRRD/NORPLAN 127

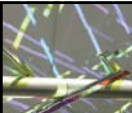


7. Working with Forms Cont'd

❖ **Use the AutoForm Wizard to Create a form:**

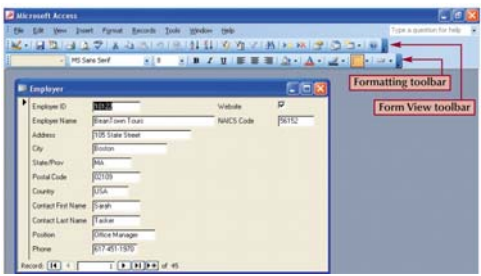
- The **AutoForm Wizard** uses a table (or query) you select as the basis to create a form that displays all the fields of the table (or query).
- Once you have created your form, you can view the records one record at a time.
- The form has a navigation bar just like the navigation bar you have already used in the Table or Query Datasheet view.

Data Management 2 MS... Access Training by MRRD/NORPLAN 128



7. Working with Forms Cont'd

❖ **Ms-Access Form View:**



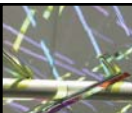
Data Management 2 MS... Access Training by MRRD/NORPLAN 129



8. SORTING AND FILTERING RECORDS

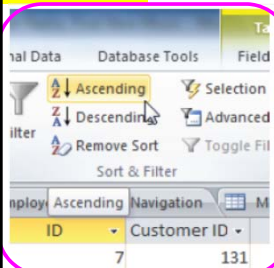
130

Data Management 2 MS... Access Training



8. Sorting and Filtering Records

➤ **Introduction:**



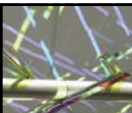
Ms-Access gives you the ability to work with enormous amounts of data, which means it can be difficult to learn anything about your database just by glancing at it.

- *Sorting and*
- *filtering*

are two tools that let you customize how you organize and view your data, making it more convenient to work with.

131

Data Management 2 MS... Access Training by MRRD/NORPLAN



8. Sorting and Filtering Records

➤ **Introduction (to sort record):**

There are many ways records can be sorted. *For example*, the information in a database belonging to a **bakery** could be sorted in several ways:

Orders could be sorted:

- by order date
- or by the **last name** of the customers who placed the orders.

Customers could be sorted:

- by **name** or
- by the **city** or **zip code** where customers live.

Products could be sorted:

- by **name**,
- **category** (pies, cakes, cupcakes, etc.),
- or **price**.

132

Data Management 2 MS... Access Training by MRRD/NORPLAN

8. Sorting and Filtering Records

➤ Introduction (to sort records) Cont'd:

You can sort both text and numbers in two ways:

- I. in ascending order
- II. or descending order.

"Ascending" means "going up," so an ascending sort will arrange numbers from smallest to largest and text from A to Z.

"Descending" means "going down," or largest to smallest for numbers and Z to A for text.

Data Management 2 MS... Access Training by MRRD/NORPLAN

133

8. Sorting and Filtering Records

➤ To sort records an example:

Select a field in the cell you wish to sort by. In this example, we will sort by customers' last names.

ID	First Name	Last Name	Age
1	Tracey	Beckham	71
2	Lucinda	George	78
3	Jerrold	Smith	21
4	Brett	Newkirk	47
5	Chloe	Jones	23
6	Quinton	Boyd	41
7	Alex	Hinton	10
8	Nisha	Hall	12
9	Hillary	Clayton	25
10	Kiara	Williams	90
11	Katy	Jones	45

Data Management 2 MS... Access Training by MRRD/NORPLAN

134

8. Sorting and Filtering Records

➤ To sort records an example Cont'd:

- Click the **Home** tab on the Ribbon, and locate the Sort & Filter group.
- Sort the field by selecting the **Ascending** or **Descending** command.

ID	First Name	Last Name	Age
1	Tracey	Beckham	71
2	Lucinda	George	78
3	Jerrold	Smith	21
4	Brett	Newkirk	47

Data Management 2 MS... Access Training by MRRD/NORPLAN

135

8. Sorting and Filtering Records

- To sort records an example Cont'd (result of Ascending sorting):

Sort & Filter		Records	
Database Navigation		Customers	
First Name	Last Name		
102 Theodore	Achi		
195 Kris	Ackerman		
78 Michiko	Akiwana		
188 Nathan	Albee		
13 Mariah	Allen		
37 Carol	Allenson		
38 Zoey	Altman		
163 Franz	Angelou		
87 Robert	Armisen		
47 Hakim	Auden		
129 Yann	Augerot		

Data Management 2 MS... Access Training by MRRD/NORPLAN

136

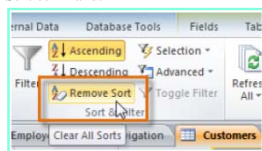
8. Sorting and Filtering Records

- To sort records an example Cont'd (saving and removing sorting):

To save the new sort, click the **Save** command on the **Quick Access toolbar**.



After you **save** the sort, the records will stay sorted that way until you perform another sort or **remove** the current one. To **remove** a sort, simply click the **Remove Sort** command.



Data Management 2 MS... Access Training by MRRD/NORPLAN

137

8. Sorting and Filtering Records

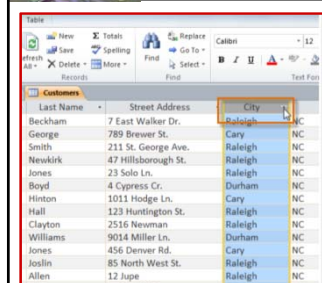
- **Filtering Records:**

- ☐ **Filters** allow you to view only the **data** you want to see. When you **create a filter**, you set **criteria** for the data you want to display.
- ☐ The filter then **searches** all of the records in the table, finds the ones that meet your **search criteria**, and temporarily hides the ones that don't.

Data Management 2 MS... Access Training by MRRD/NORPLAN

138

8. Sorting and Filtering Records



Last Name	Street Address	City	State
Beckham	7 East Walker Dr.	Raleigh	NC
George	789 Brewer St.	Cary	NC
Smith	211 St. George Ave.	Raleigh	NC
Newkirk	47 Hillsborough St.	Raleigh	NC
Jones	23 Solo Ln.	Raleigh	NC
Boyd	4 Cypress Cr.	Durham	NC
Hinton	1011 Hodge Ln.	Cary	NC
Hall	123 Huntington St.	Raleigh	NC
Clayton	2516 Newman	Raleigh	NC
Williams	9014 Miller Ln.	Durham	NC
Jones	456 Denver Rd.	Cary	NC
Joslin	85 North West St.	Raleigh	NC
Allen	12 Juke	Raleigh	NC

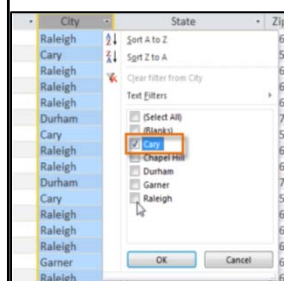
➤ To create a simple Filter:

Click the **drop-down** arrow next to the field you would like to filter by. We will filter by city, as we want to see a list of customers **who live in a certain city**.

Data Management 2 MS... Access Training by MRRD/NORPLAN

139

8. Sorting and Filtering Records



➤ To create a simple Filter:

- **Select** and **deselect** items one at a time by clicking their check boxes.
- We will **deselect all** of the options except for **Cary**.
- Click **Select All** to include every item in the filter.
- Clicking **Select All** a second time will deselect all items.
- Click **Blank** to set the filter to find only the records with no data in the selected field.
- Click **OK**.

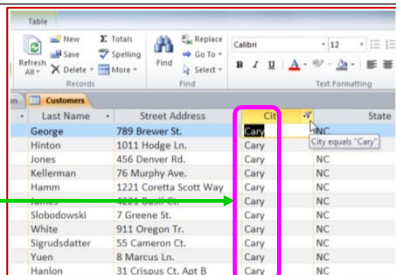
Data Management 2 MS... Access Training by MRRD/NORPLAN

140

8. Sorting and Filtering Records

➤ To create a simple Filter Cont'd
(result of filtering):

The filter will be applied. Our customers table now displays only customers who live in **Cary**.



Last Name	Street Address	City	State
George	789 Brewer St.	Cary	NC
Hinton	1011 Hodge Ln.	Cary	NC
Jones	456 Denver Rd.	Cary	NC
Kellerman	76 Murphy Ave.	Cary	NC
Hamm	1221 Coretta Scott Way	Cary	NC
Slobodowski	7 Greene St.	Cary	NC
White	911 Oregon Tr.	Cary	NC
Sigrudsdatter	55 Cameron Ct.	Cary	NC
Yuen	8 Marcus Ln.	Cary	NC
Hanlon	31 Crispus Ct. Apt B	Cary	NC

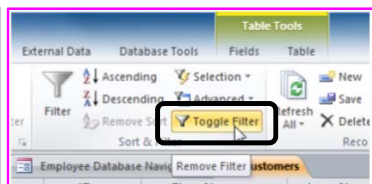
Data Management 2 MS... Access Training by MRRD/NORPLAN

141

8. Sorting and Filtering Records

➤ To create a simple Filter Cont'd (Toggle Filter):

- **Toggling** your filter allows you to turn it **on** and **off**.
- To view records without the filter, simply click the **Toggle Filter** command.
- To restore the filter, simply **click it again**.



Data Management 2 MS... Access Training by MRRD/NORPLAN

142

8. Sorting and Filtering Records

➤ Creating a filter from a selection

Filtering by **selection** allows you to select specific data from your table and find data that is **similar** or **dissimilar** to it. For instance, if you were working with a bakery's database and wanted to **search** for all products whose names contained the word "**chocolate**" you could select that word in one product name and create a filter with that selection. Creating a filter with a selection can be more **convenient** than setting up a simple filter if the field you're working with contains **many items**.

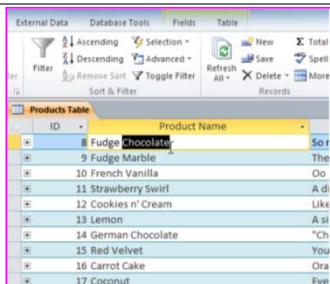
Data Management 2 MS... Access Training by MRRD/NORPLAN

143

8. Sorting and Filtering Records

➤ Creating a filter from a selection Cont'd

- Select the **cell** or **data**.
- All products that contain the word "**chocolate**" in their names.
- Select the **Home** tab on the Ribbon.
- locate the **Sort & Filter** group
- Click the **Selection** drop-down arrow



Data Management 2 MS... Access Training by MRRD/NORPLAN

144

8. Sorting and Filtering Records

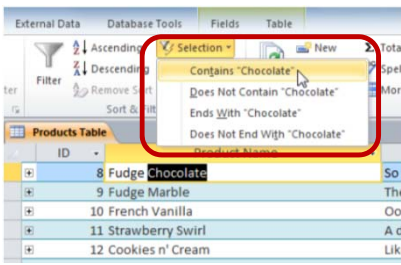
➤ Creating a filter from a selection Cont'd



Data Management 2 MS... Access Training by MRRD/NORPLAN 145

8. Sorting and Filtering Records

➤ Creating a filter from a selection Cont'd

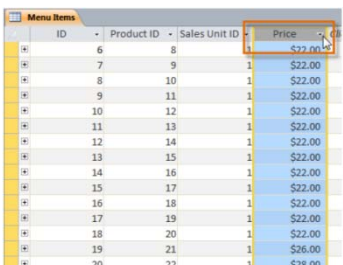


Data Management 2 MS... Access Training by MRRD/NORPLAN 146

8. Sorting and Filtering Records

➤ To create a simple Filter Cont'd (to Filter Number):

- ✓ Click the **drop-down arrow** next to the field you would like to filter by.
- ✓ We want to filter the records in our menu items table by price, so we'll click the arrow in the **Price field**.

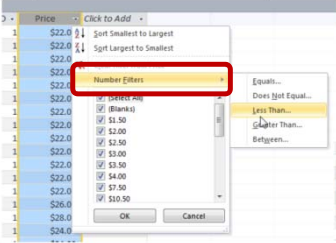


Data Management 2 MS... Access Training by MRRD/NORPLAN

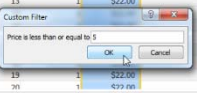


8. Sorting and Filtering Records

➤ To create a simple Filter Cont'd (to Filter Number):

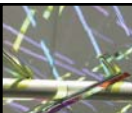


The Custom Filter dialog box will appear. Type in the number or numbers you would like to use in your filter. We'll type "5" so the filter will show us only menu items that cost \$5 or less. Click OK



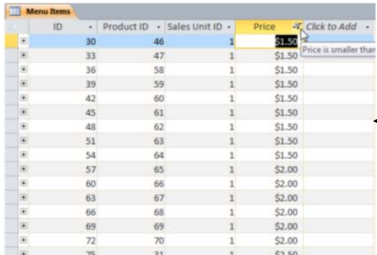
Data Management 2 MS... Access Training by MRRD/NORPLAN

148



8. Sorting and Filtering Records

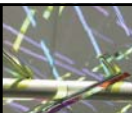
➤ To create a simple Filter Cont'd (to Filter Number):



The filter result will be displayed as the this figure.

Data Management 2 MS... Access Training by MRRD/NORPLAN

149



9. DESIGNING A QUERY

Data Management 2 MS... Access Training

150
