

# Microsoft Access Tutorial: The Basics

## Part 1:

### 1. Start MS Access

From the Start menu click on  
    > Programs  
        > Microsoft Office  
            > Microsoft Office  
                Access 2003

2. Note the **Getting Started** task pane on the right side of your screen.

3. Click on **Create a new file**.

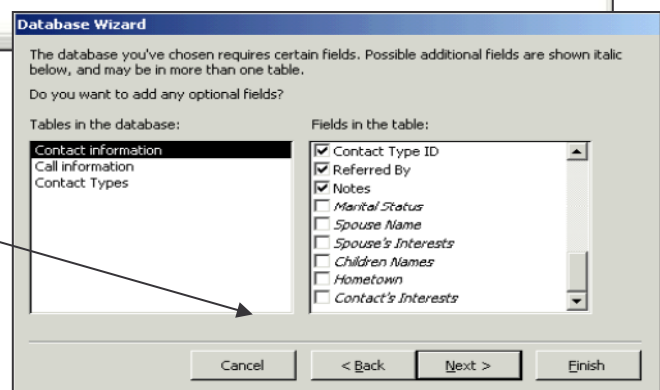
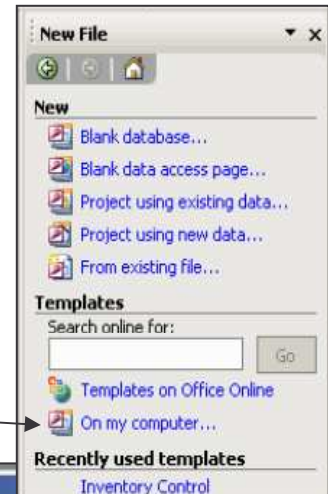
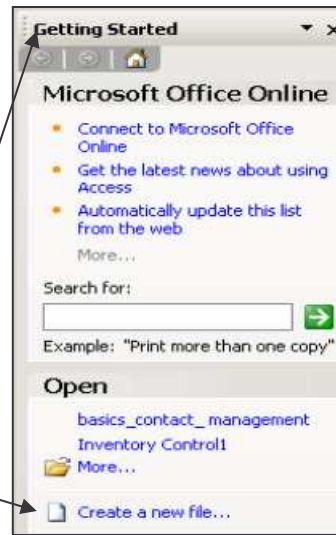
4. The **New File** task pane will appear. Under **Templates**, click **On my computer**, to open the **Templates** window. Also notice the online templates.

5. Click on the **Databases** tab. Notice that there are templates for all types of databases.

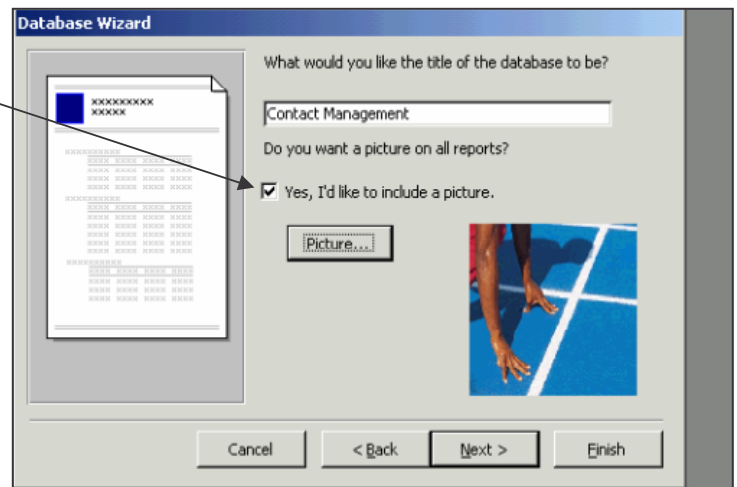
Double click on the **Contact Management** icon. The **File New Database** window will appear. Select **Desktop**, use the default name and then click the **Create** button. The .mdb extension will automatically be added.

6. In a moment, the **Database Wizard** window will guide you through the process.

- In the first window, click **Next**.
- In the second window, you can select optional fields to be included in your **Contact Information** table.
- Scroll to the bottom of the right hand column to view the optional fields. Notice the other two tables in the left hand column. They include different fields.
- Click **Next** and choose Standard style for your screen displays. You can preview other styles by clicking on each name.

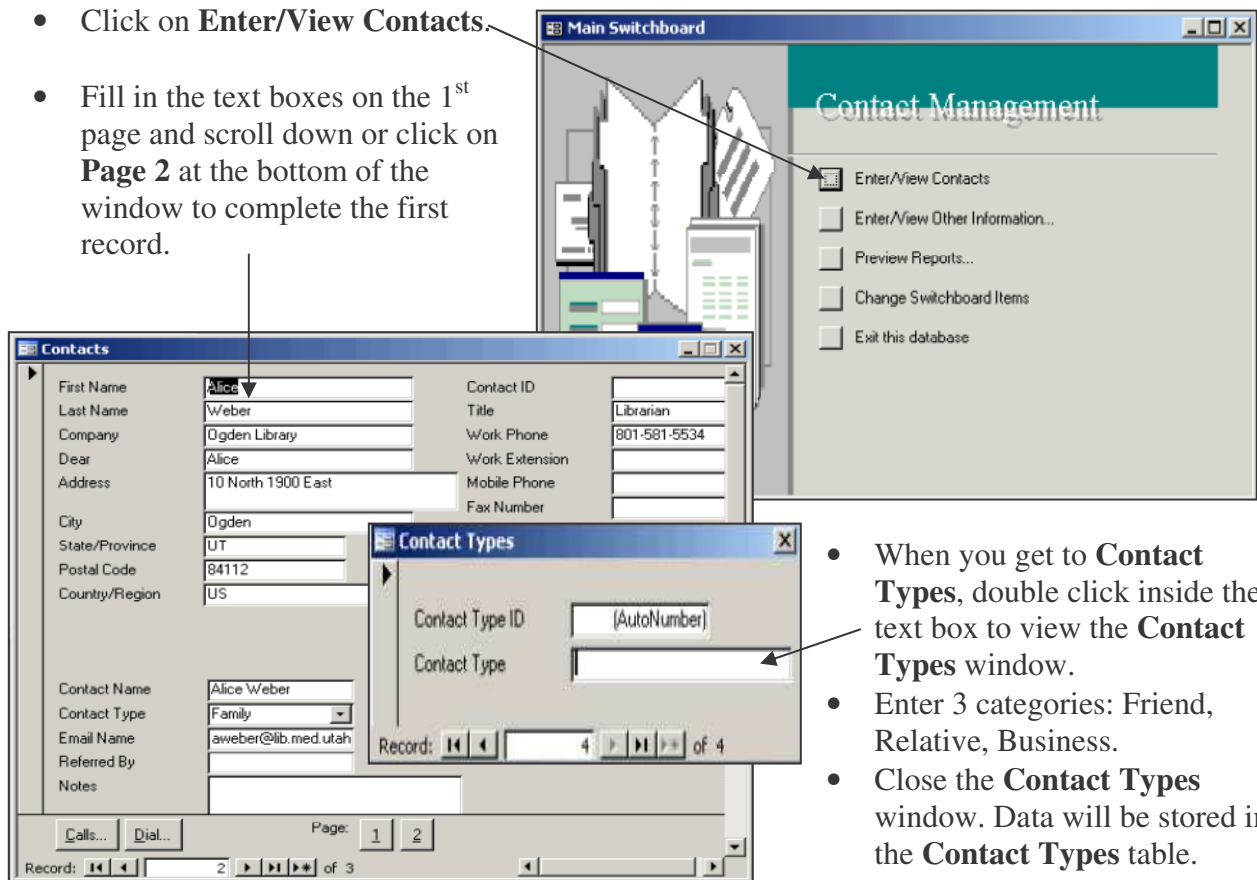


- Click **Next** and choose Standard style for your printed reports.
- Click **Next** and accept the default.
- You may choose to include a picture by checking **Yes**. Then click on the **Picture** button to browse to \My Documents\My Pictures and select a picture from your files.
- Click **Next** and in the next window click **Finish**.
- Sit back and watch Microsoft Access create your database.



7. The **Main Switchboard** window will appear. This menu allows you to access your data.

- Click on **Enter/View Contacts**.
- Fill in the text boxes on the 1<sup>st</sup> page and scroll down or click on **Page 2** at the bottom of the window to complete the first record.



- When you get to **Contact Types**, double click inside the text box to view the **Contact Types** window.
- Enter 3 categories: Friend, Relative, Business.
- Close the **Contact Types** window. Data will be stored in the **Contact Types** table.

- To add additional records, click on any button with a right-pointing arrow.
- Add a total of 3 records.



- For each contact, add 1 call by clicking on the **Calls** button and entering the requested data.
- To view this data, go to the **Main Switchboard**, click on **Preview Reports** and preview both reports.



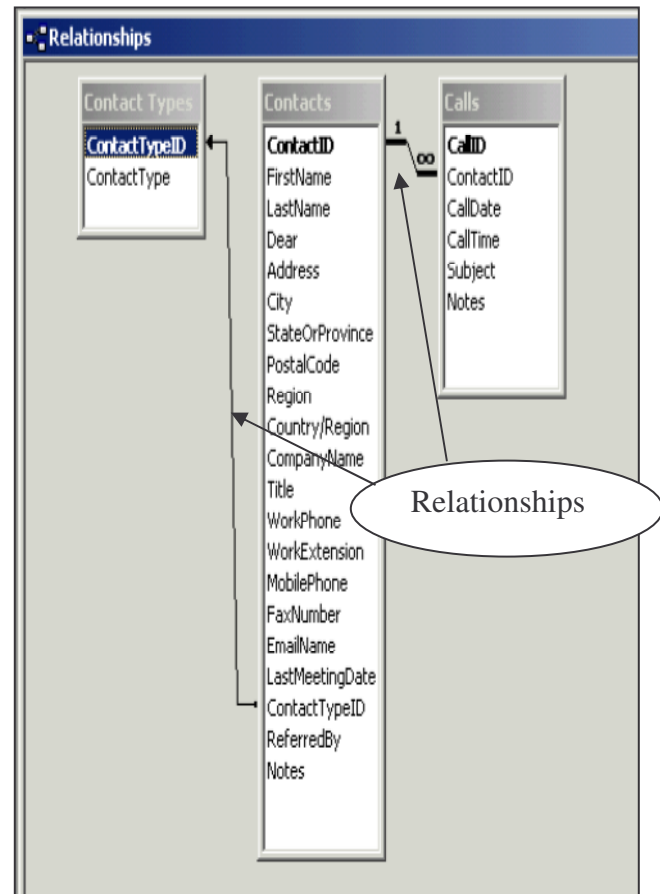
## Part 2: Database Structure

- From the top menu bar, choose  
     >Tools  
     > Relationships

MS Access will open the Relationships window which displays the Tables in your database. This is the database **structure**, **not the actual data**.

Notice that you have three Tables in your database: Contact Types, Contacts, Calls.

The relationships between these tables insure the accuracy of your data.



- Table
  - Chief structure that stores data, and represents a single subject, an object or an event.
  - Example: “Contacts” is a subject-related table, while “Calls” is an event-related table.
- Fields
  - A table is made up of fields.
  - A field represents a characteristic or aspect of the subject, object or event.
  - A field contains a **single value**.
  - Example: “FirstName” is a field in the Contacts table and “LastName” is also a field in the Contacts table.
  - The bolded field is the Primary Key.
- Keys
  - Primary Key
    - The Primary Key uniquely identifies a record within a table.
    - The Primary Key establishes a relationship between two tables.
    - The Primary Key is usually an auto-generated number.
    - Example: “ContactType ID” is the primary key in the Contact Types table.

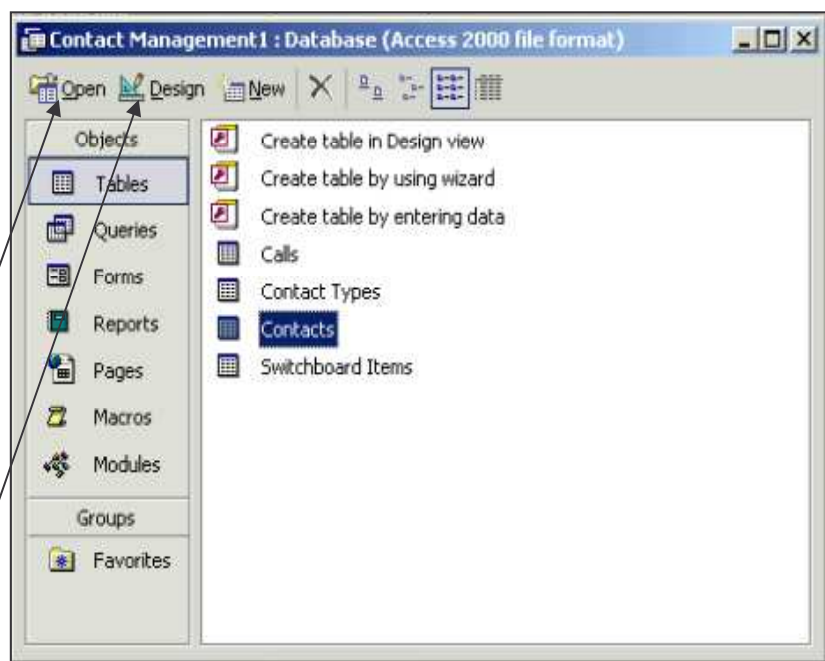
- Foreign Key
    - The Foreign Key is a field from one table placed into another table.
    - The Foreign Key facilitates a relationship between two tables.
    - Example: “ContactType ID” is the foreign key in the Contacts table.
  - Relationships
    - Relationships are the connections between the tables.
    - Example: The arrows between the tables in the Relationship view represent the relationships.
5. Record – the actual data in the fields, in the table
- A row of data within a table that represents a unique instance of the subject, object or event.
  - Example: Each person you entered into the Contacts table became a record.

### Part 3: Viewing Your Data

To view your data, minimize the **Relationships** window, look at the lower left corner of your screen, and maximize the database window labeled “Contact Man...” MS Access will open the database window.



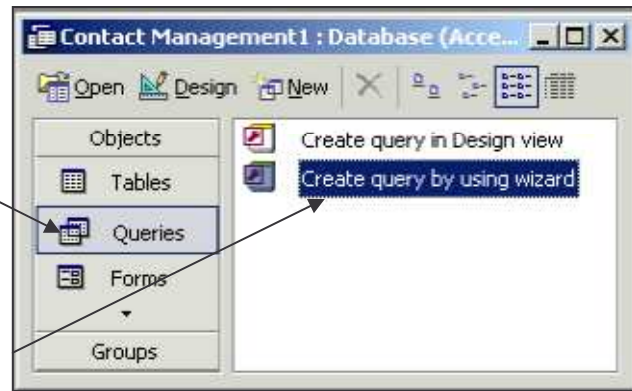
1. Objects  
Listed on the left is a menu of objects: Tables, Queries, Forms, Reports, etc.
2. Tables  
Choose the **Tables** button from the left hand column. Highlight the **Contacts** table in the right hand column.
  - When you select the **Open** button, your records are displayed in spreadsheet format.
  - When you select the **Design** button, the table structure is displayed.
  - Close the **Contacts** table window.



### 3. Queries

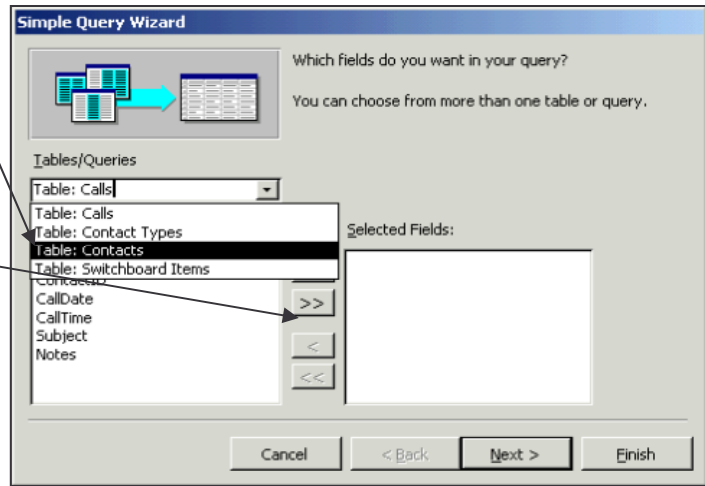
A query is a search for specific information in your database

- Choose the **Queries** button from the left hand column.



- Double click on **Create query by using wizard**.

- Select **Table: Contacts** from the Tables/Queries dropdown menu.



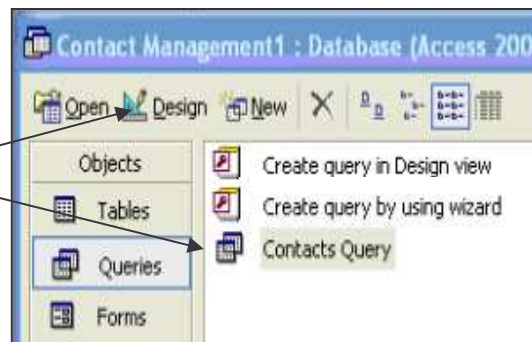
- Choose the >> button to select all the fields.

- Click **Next**.

- Click **Next again** and accept the default query name.

- Click **Finish**.

- When you close the query, it will be listed as **Contacts Query** in the **Queries** list.



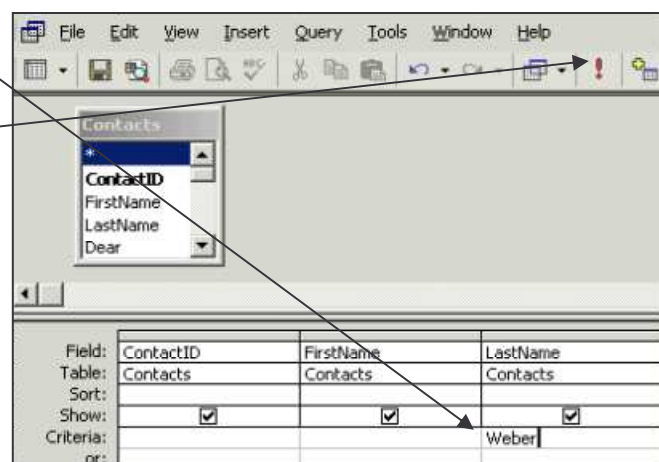
- Click the **Design** button in the upper left corner.

- Enter your search criteria into the appropriate column(s).

- Run the query by clicking on the **!** button.

- The results of the query are displayed in spreadsheet format.

- The check boxes on the **Show** line control whether a field is displayed.



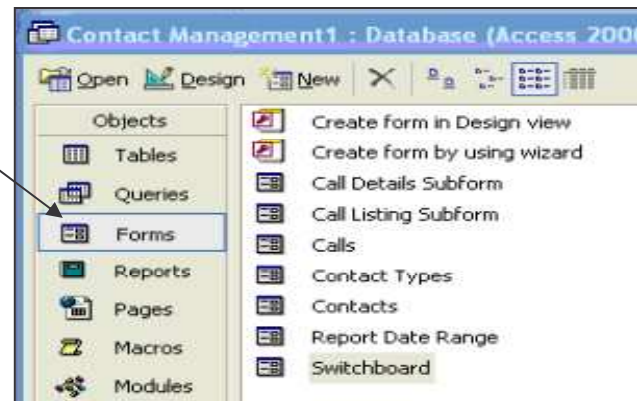


- To create a prompted query, enter your prompt in brackets (e.g, [Enter Last Name:] ).
- To rename the query based on the criteria, choose  
     > File  
         > Save As      Last Name Query
- Close the **Query results** window.
- The new query appears in the **Queries** list. You can re-run the query by double clicking on it.
- To save as an Excel spreadsheet, go to Tools > Office Links > Analyze It with MS Excel.

#### 4. Forms

Allow you to enter records into your tables.

- Choose the **Forms** button from the left hand column.
- The wizard has created several forms for use with this database.
- Double click on the **Contacts** form. This is the form you used earlier to enter data.

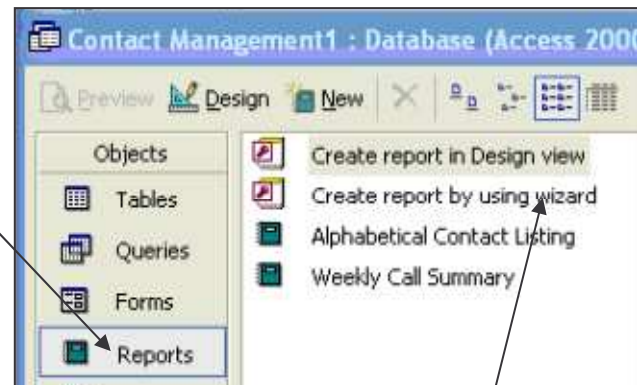


- Click on the **Design** button to see the Design View which was used by the wizard to create this form. The label boxes are transparent. The field boxes are opaque.
- Close **Contacts** form window.

#### 5. Reports

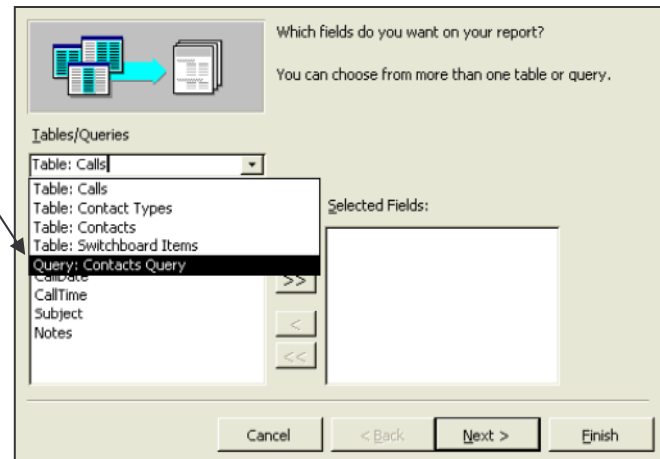
Summarize your data for a professional look and enable sharing and printing.

- Choose the **Reports** button from the left hand column.
- The wizard has created two reports:
  - Alphabetical Contact Listing
  - Weekly Call Summary



- Double click on **Alphabetical Contact Listing** to view this report.
- Click on the **Design** button to see the Design View which was used to create this report. Close the report.
- Double click on **Create report by using wizard** to create your own report. You can create reports from any tables or from any queries.

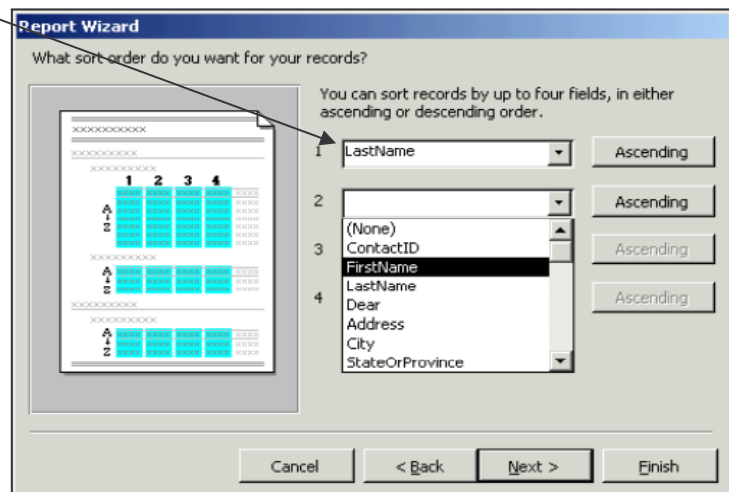
- Select **Query: Contacts Query** from the Tables/Queries dropdown menu.
- Click on **FirstName** and use the > button to move it to **Selected Fields** window. Repeat for the next 4 fields (skipping **Dear**).
- Click **Next**. Accept the default grouping.



- Click **Next again** to sort records by up to 4 fields in either ascending or descending order.

Select **LastName** for the 1<sup>st</sup> box and **FirstName** for the 2<sup>nd</sup> box.

- Click **Next** to select **Landscape** orientation.
- Click **Next** to choose the style.
- Click **Next again** and name the report 'Contacts Query Report'.
- Click **Finish** to display your report.
- The new report appears in the list of **Reports**. You can re-run the report by double clicking on it.



- Click the **Design** button in the upper left corner to see the Design View which was used by the wizard to create this report.

#### 6. With What You Know Now, You Can:

- Navigate MS Access
- Create simple databases using MS Access Templates (like your holiday card list)
- Create simple queries and reports using MS Access wizards

#### 7. Assignment – doing this takes practice!

- Make a copy of your database by right clicking on the file name > Copy. Paste on Desktop.
- Work through the tutorial on your own workstation.
- Create a simple database that you can use at home or work.
- Create simple queries and reports and check to be sure that the results are accurate based on the data you put into your database.
- Call or email us if you have questions.