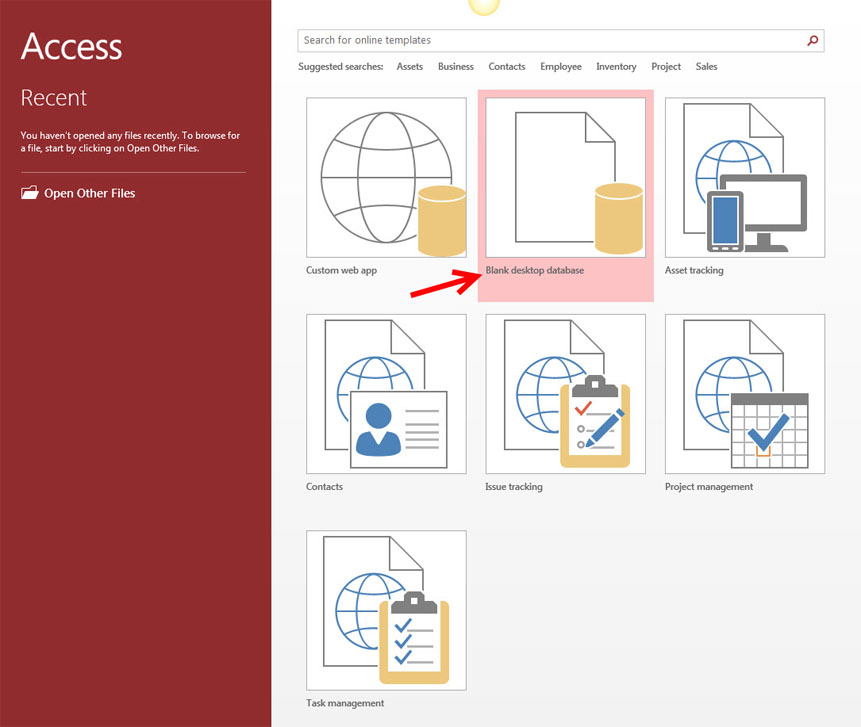
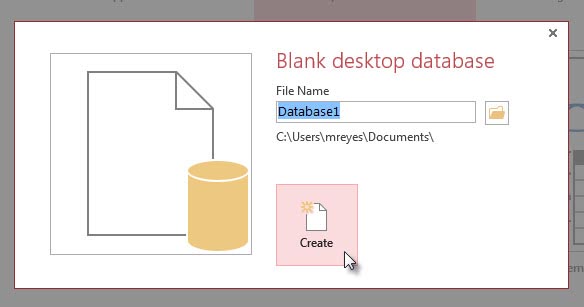
**File Menu Tab**

The file menu tab allows you to create a new database. Open an existing database, save and save as, print, send, or close. One of the things you'll notice with the templates when launching Access, is that the default is now a Custom web app. So Access continues to move in the direction of a web development application as opposed to a database application, but we're going to click the next option, which is **Blank desktop database**.



Give it a name, and click **Create**.

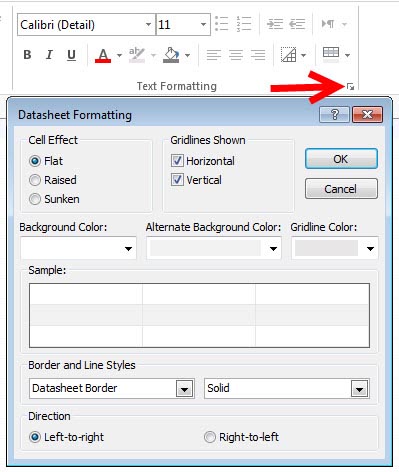


**The Ribbon**

The ribbon is the panel at the top portion of the document. It has six tabs:  Home, Create, External Data, Database Tools, Fields, and Tables.  Each tab is divided into groups.  The groups are logical collections of features designed to perform function that you will utilize in developing or editing your Access database.

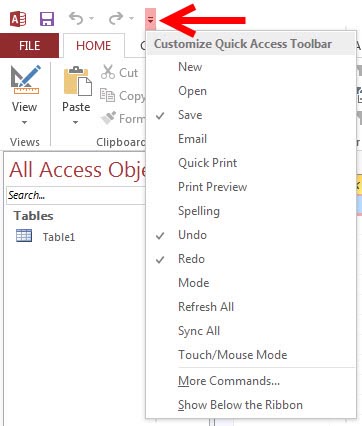


Commonly utilized features are displayed on the Ribbon.  To view additional features within each group, click the arrow at the bottom right corner of each group.



**Home:** Views, Clipboard, Sort & Filter, Records, Find, Text Formatting **Create:** Templates, Tables, Queries, Forms, Reports, Macros & Code **External Data:** Import & Link, Export **Database Tools:** Tools, Macro, Relationships, Analyze, Move Data, Add-Ins  
**Fields:** Views, Add & Delete, Properties, Formatting, Field Validation  
**Tables:** Properties, Before Events, After Events, Named Macros, Relationships

**Quick Access Toolbar**The **quick access toolbar** is a customizable toolbar that contains commands that you may want to use.  You can place the quick access toolbar above or below the ribbon.  To change the location of the quick access toolbar, click on the error at the end of the toolbar and click **Show Below the Ribbon**.



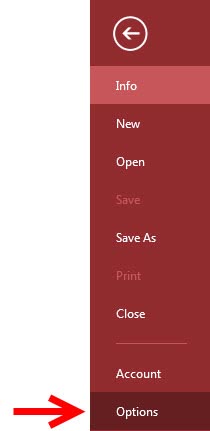
**CUSTOMIZE**

**Customize**

Customize allows you to add features to the Quick Access Toolbar.  If there are tools that you are utilizing frequently, you may want to add these to the Quick Access Toolbar.

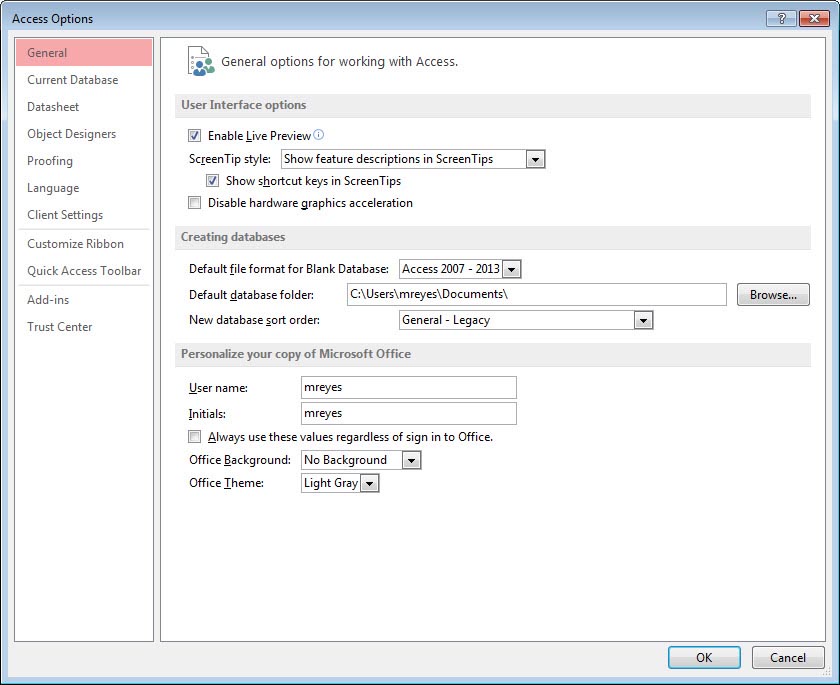
Access offers a wide range of customizable options that allow you to make Access work best for you. To access these customizable options:

* Click the **File** menu tab
* Click **Options**



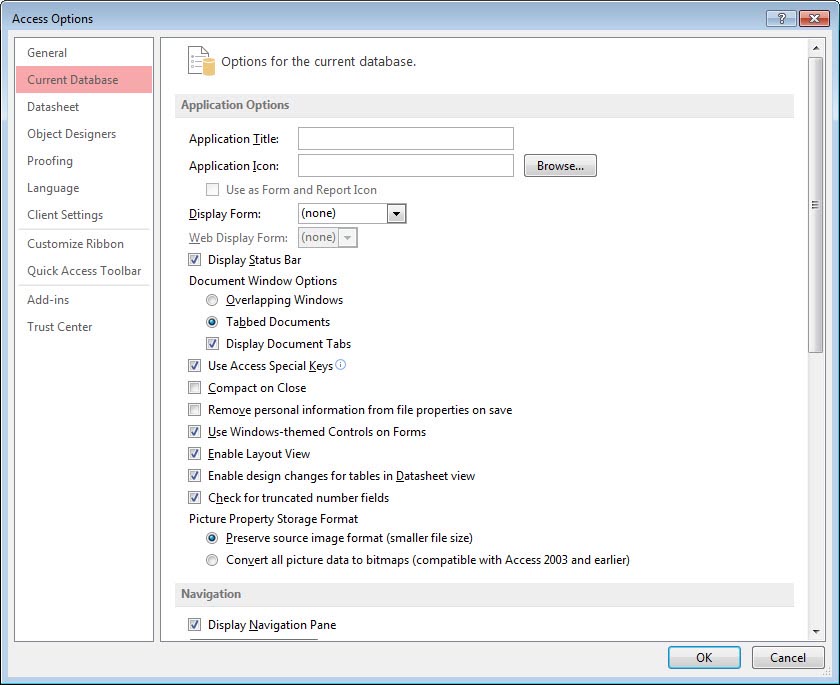
**General**

These features allow you to personalize your work environment with the use of ScreenTips, the location and file format of the databases, and the username.



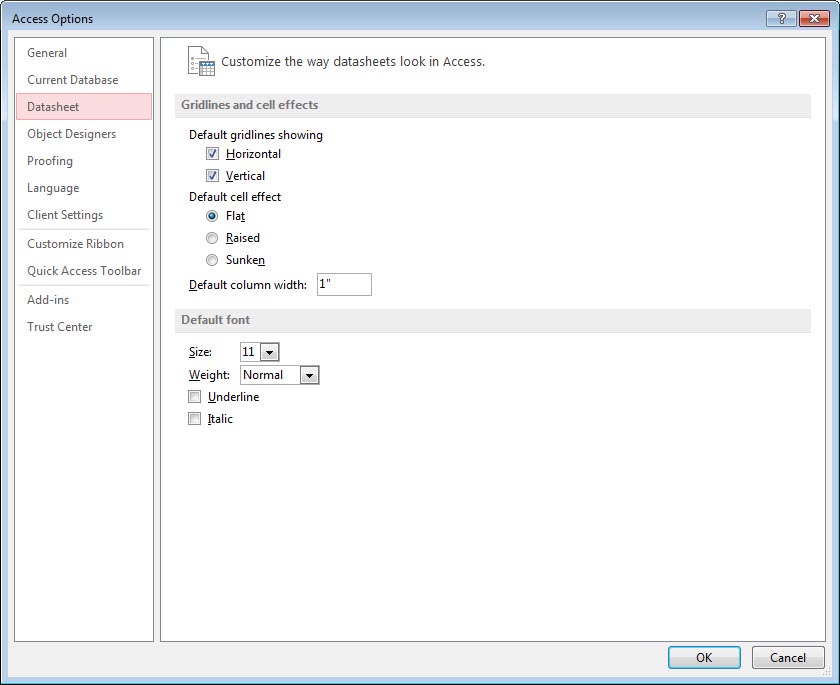
**Current Database**

This feature allows you to set options for the Application, Navigation, Ribbon and Toolbars, AutoCorrect, and Filters.



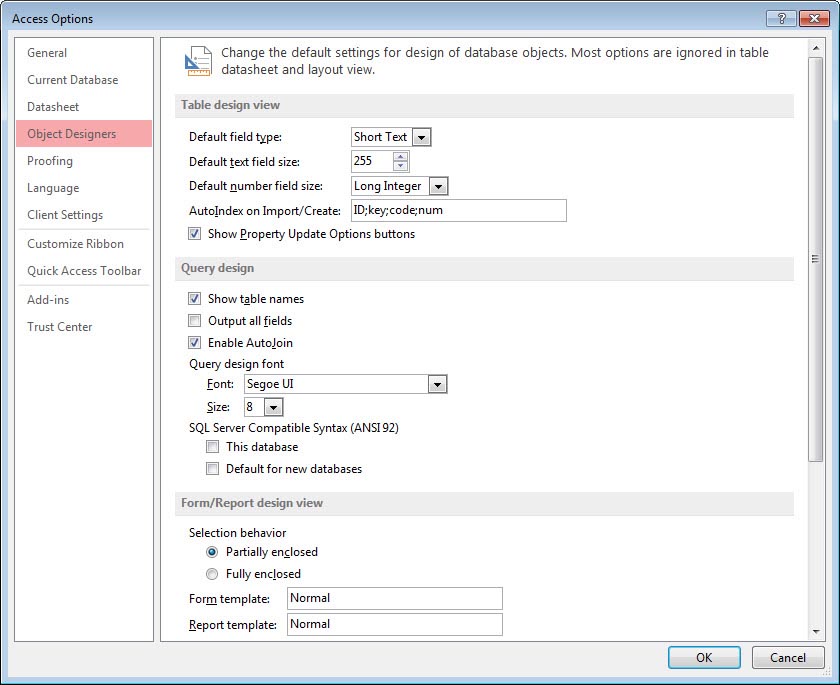
**Datasheet**

This features allows you to personalize options in the way the datasheet looks, including default colors, gridlines and cell effect, and font.



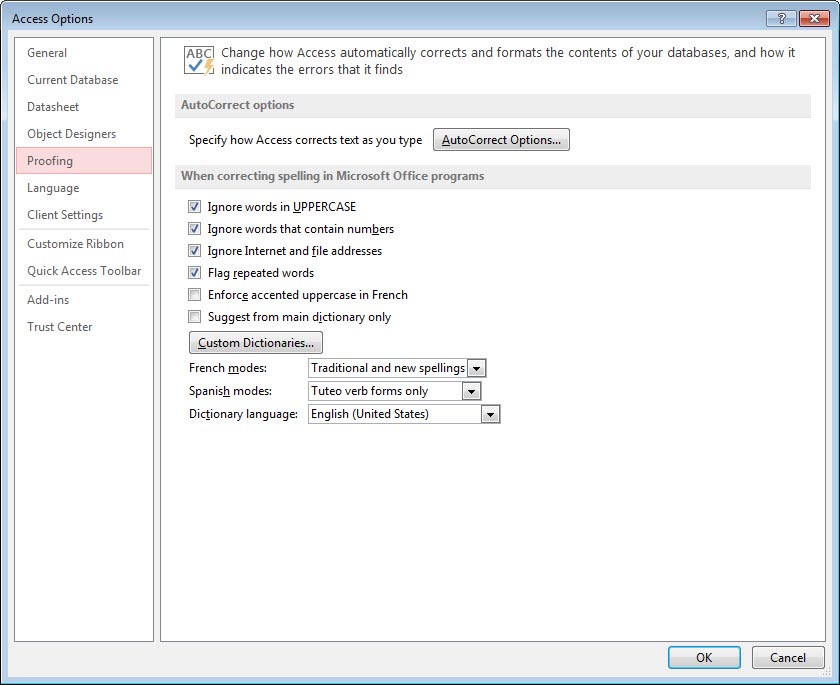
**Object Designers**

This feature allows you to customize the options for creating and modifying database objects in Access including Table Design, Query Design, Forms/Reports, and Error Checking.



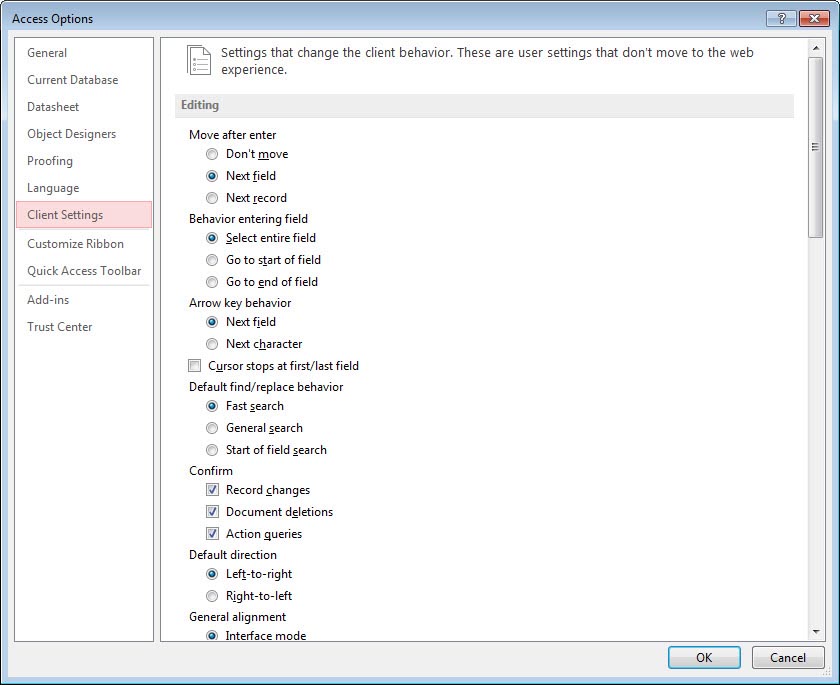
**Proofing**

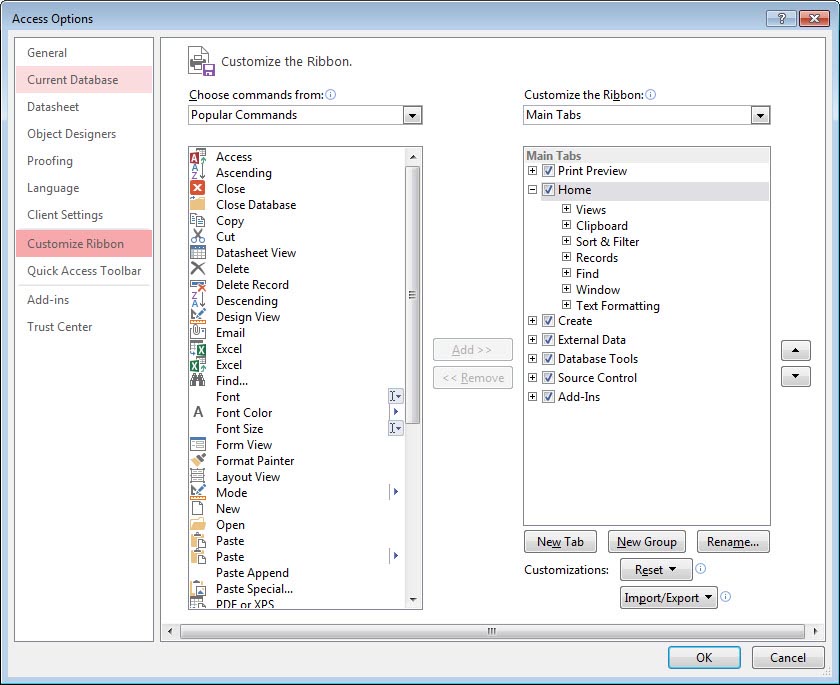
This features allows you to change how Access automatically correct and formats the contents of the database and how it indicates errors.



**Client Settings**

This feature allows for advanced customization of Access including, Editing, Display, Printing, and other advanced options.

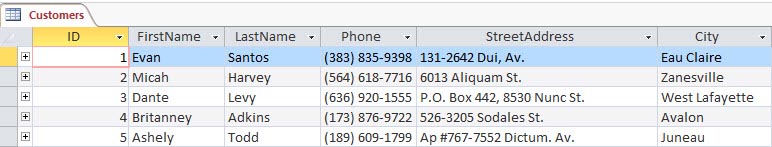




**TERMS**

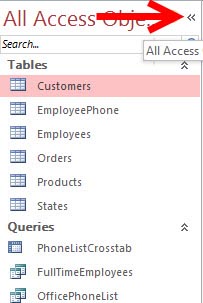
**Table**

A table is a collection of information arranged in rows and columns.  Information about an item is displayed in a row.  Columns contain the same type of information for each item.  The table has a header row that tells you what data is contained in the columns.

****

To view data in a table:

* Click the **arrow** to open the navigation pane
* Double-click on the table name to open the table

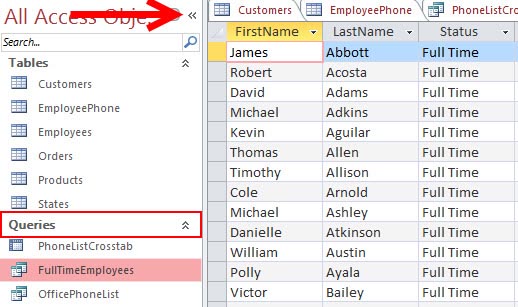


**Query**

Queries select records from one or more tables in a database so they can be viewed, analyzed, and sorted on a common datasheet. A query can also perform calculations and display the results.  The resulting collection of records, called a **dynaset** (short for dynamic subset), is saved as a database object and can therefore be easily used in the future. The query will be updated whenever the original tables are updated. Types of queries are **select queries** that extract data from tables based on specified values, **find duplicate** queries that display records with duplicate values for one or more of the specified fields, and **find** **unmatched** queries display records from one table that do not have corresponding values in a second table.

To run a query:

* Click the **arrow** to open the navigation pane
* Double-click on the query name



**Recordset**

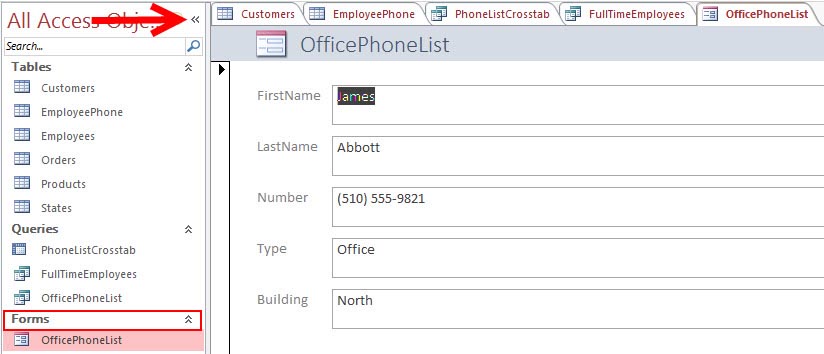
A recordset is a table that displays groups of records from a base table or as a query result.

**Form**

A form is a graphical interface that is used to display and edit data.  Forms can be developed from a table or a query.  Forms can include calculations, graphics and objects.

To view data using a form:

* Click the **arrow** to open the navigation pane
* Double-click on the form name

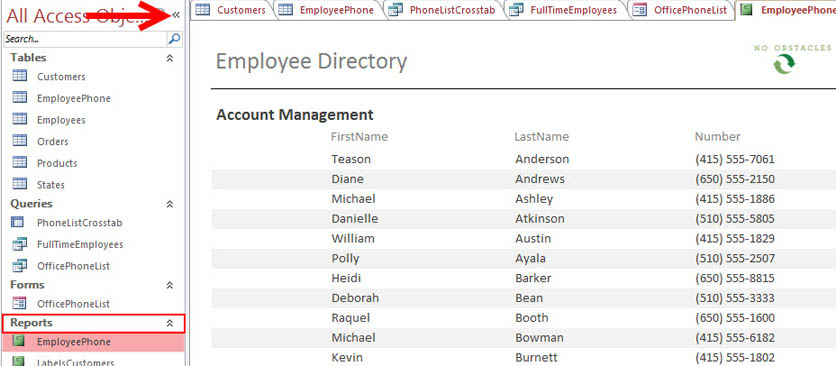


**Report**

A report is an output of data arranged in the order you specify.  Reports can perform calculations and display the results.  Reports can be used to print data.

To view data using a form:

* Click the **arrow** to open the navigation pane
* Double-click on the report name



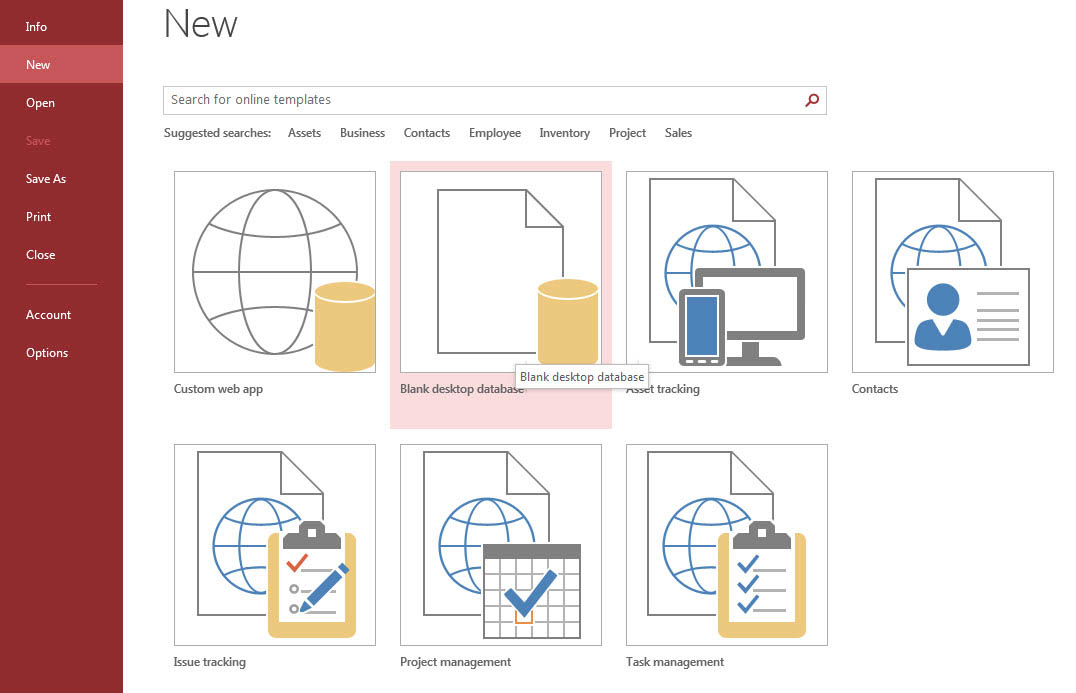
**CREATING A NEW DATABASE**

You can create a new database from scratch or you can create a database from the database wizard.

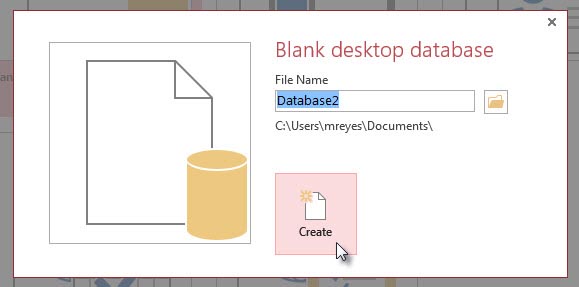
**New Database**

To create a new database from scratch:

* Click the **File** menu tab
* Click New
* Click **Blank desktop database**



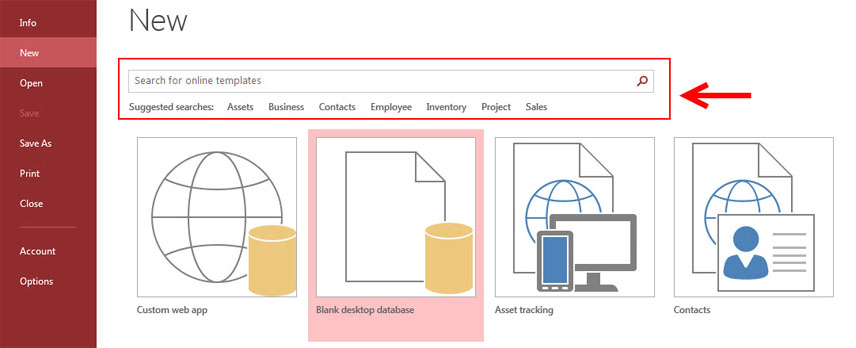
* Type in a name for the database
* Click **Create**



**Database Templates**

To create a new database from the database templates:

* Click the File menu tab
* Click New
* Choose from one of the templates or search for online templates



* Type in the name for the database
* Click **Create**

**CREATING A TABLE**

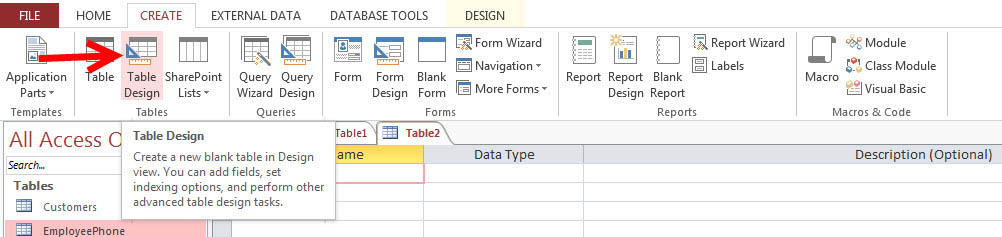
**Table Views**

There are two ways to view a table in Access to add data to the table:  **Design View** and **Datasheet View**.

In **Design View** you can view all the fields with the data types and descriptions.  The records of information that has been added to the database is not viewable.

To go to **Design View**:

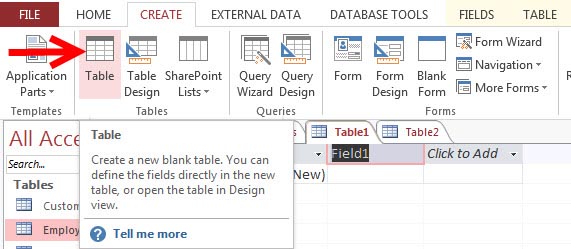
* Click the **Create** tab
* Click **Table Design**



In **Datasheet View** you can display the records in a table, where one row is one record.  The column headers are the fields you have defined for the database.

To go to **Datasheet View:**

* Click the Create tab
* Click **Table**

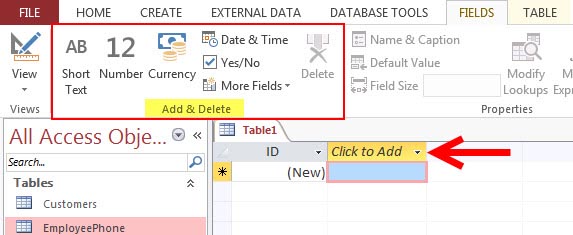


**Adding New Fields**

There are many ways to enter new fields into a database.  New fields can be added in the Datasheet View or in the Design View.

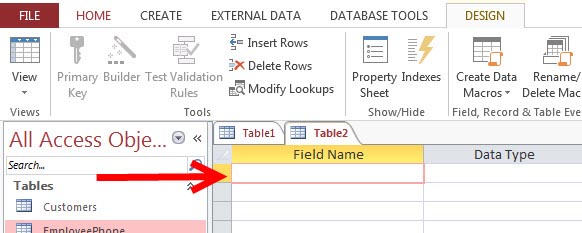
To add a New Field within the **Datasheet** **View**:

There are two ways to add a new field in Datasheet View:  **Click to Add** or choose the type of field you wish to add from the **Add & Delete** menu



To add a New Field in **Design View**:

* Click the **Design View** button
* Click on the next available field
* Type in the **Name** of the field



**Data Types**

There are many types a data that a field can be predefined to hold.  When you create a new field in a database you should closely match the data type to what will be entered into the field.

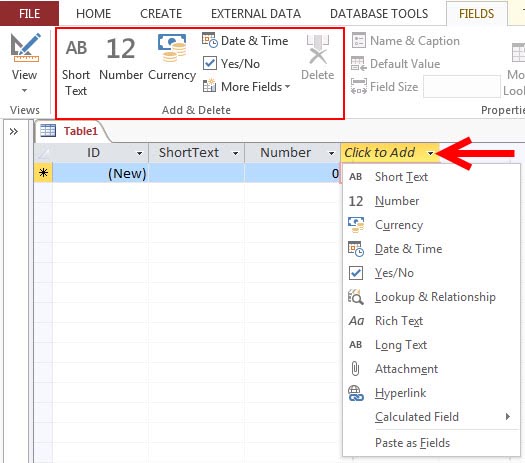
|  |  |
| --- | --- |
| Text | Text, number, or a combination up to 255 characters |
| Memo | Similar to the text field, can contain text, numbers, or a   combination up to 2 GB of data. |
| Number | Numbers up to 16 bytes of data |
| Date/Time | Date and Time information |
| Currency | Currency up to 8 bytes and precise to 4 decimal places |
| AutoNumber | Access creates a unique number for each new record.  This is often the primary key for the table |
| Yes/No | Yes and No, stored as -1 for yes and 0 for no |
| OLE Object | Images, documents, graphs up to 2 GB |
| Hyperlink | Web addresses |
| Attachment | Attachments such as images, spreadsheets, documents, and charts. |

**Editing Data Types in Fields**

When creating tables, you should define the data types of the tables to most closely match the type of data that will be entered in the field.

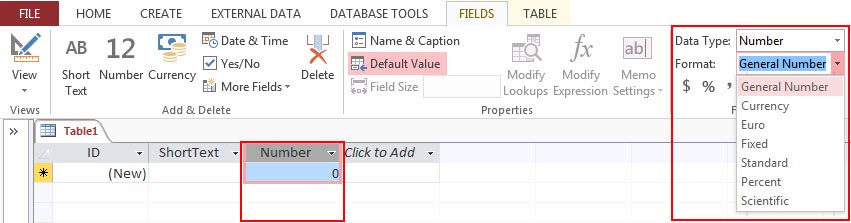
To edit the **Data Type** in **Datasheet View**:

* Click the dropdown menu on the field you wish to define from “Click to Add”
* Choose the type of data that will be entered into the field OR
* Make your choice from the “Add & Delete” section



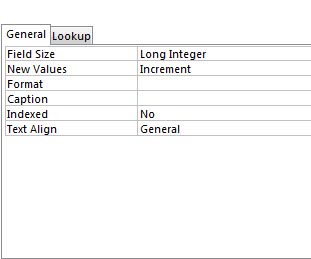
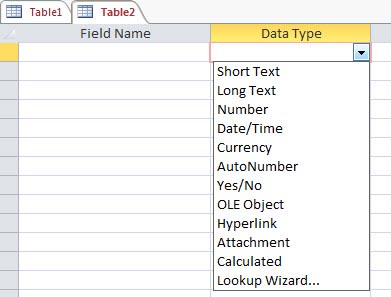
 To edit the format of the data:

* Click the field you wish to define
* Click the **Fields** tab on the Ribbon
* Click the drop down menu next to **Format**



To edit the **Data Type** in the **Design View**:

* Click the **Design View** table
* Click the field name you wish to define or create a new field
* Click the **Data Type**
* Choose the appropriate **Data Type**
* Format the field in the **Filed Properties Dialog box**

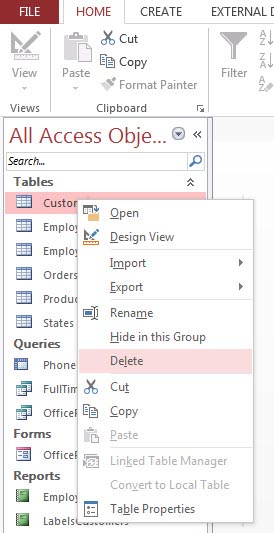


**MANAGING TABLES**

**Delete a Table**

To delete a table:

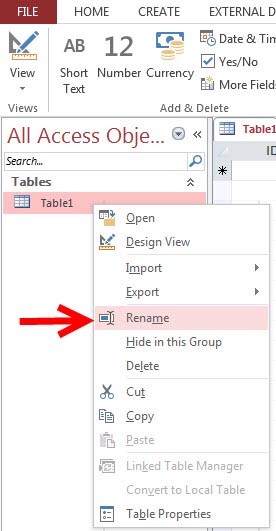
* Open the desired database by clicking on the **File** menu tab and clicking **Open**
* Right click on a table and choose **Delete**



**Rename a Table**

To rename a table:

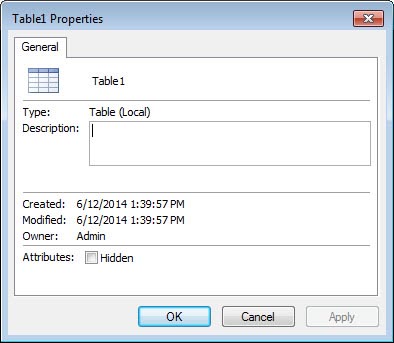
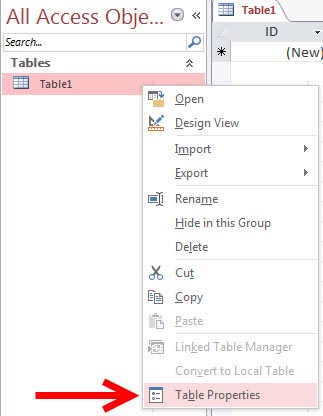
* Open the desired database by clicking on the **File** menu tab and clicking **Open**
* Right click on a table and choose **Rename**
* Type in a new name



**Add a Description to a Table**

To add a description to a table:

* Open the desired database by clicking on the **File** menu tab and clicking **Open**
* Right click on a table and choose **Table Properties**
* Click the **Description** text box
* Type in the description



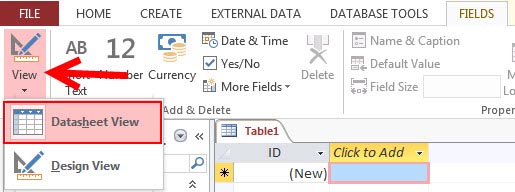
**KEYS**

**Primary Key**

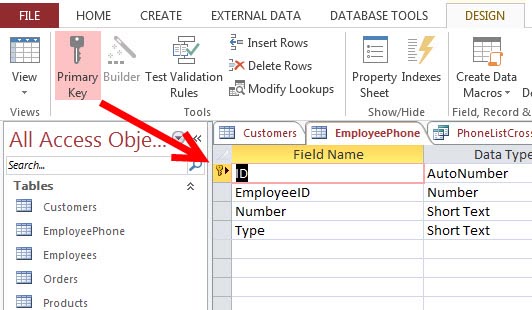
The primary key is a unique identifier for a record.  The primary key cannot be the same for two records.  This field can never be blank.

To set a table’s primary key:

* Open the table is Design View, click the Fields tab from the Ribbon, and Choose Design view



* Select the field (or fields) that you want to use and then on the ribbon, click Primary Key



**Composite Key**

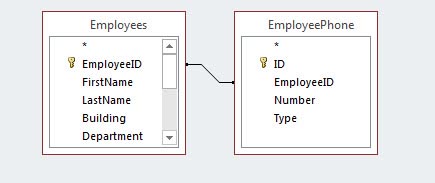
A composite key is a primary key that is comprised of two or more fields.  It can also be called a compound or concatenated key.

**Foreign Key**

A foreign key is a field or combination of fields that are related to the primary key of another table.

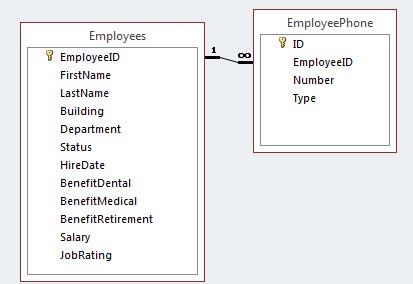
**TABLE RELATIONSHIPS**

Table relationships are the associations of data between tables.  By defining table relationships, you can pull records from related tables based on matching fields.



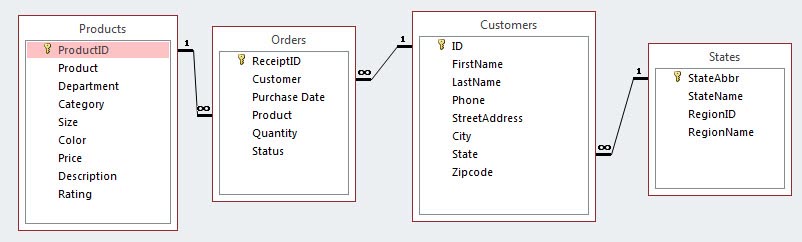
**One-to-One Relationship**

A one-to-one relationship is between two tables where the primary key in one table and the foreign key in another table are the same.  For each record in the first table, there is a single matching record in the second table.



**One-to-Many Relationship**

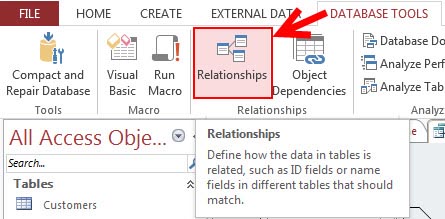
A one-to-many relationship occurs between two tables where the primary key in one table can be duplicated many times in another table.



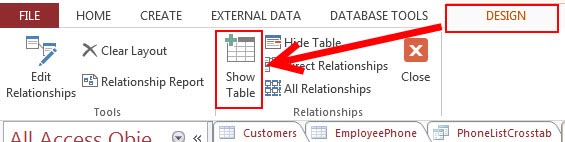
**Creating Table Relationships**

To create relationships between tables:

* Click the **Database Tools** tab on the Ribbon
* Click the **Relationships** button

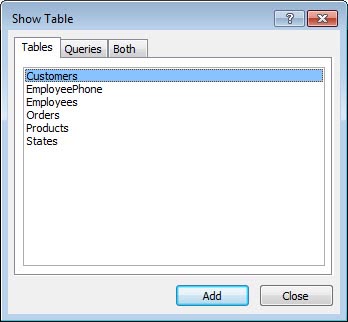


* Click on the **Design** tab
* Click **Show Table**

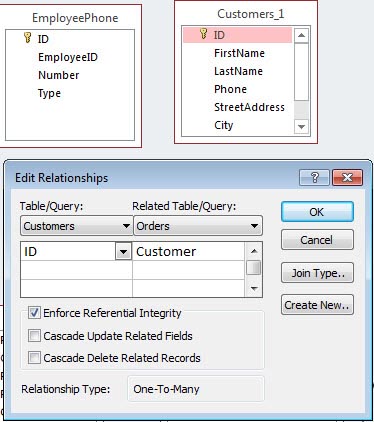


Select the desired tables

* Click **Add**
* Click **Close**

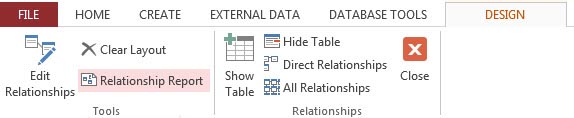


* Click the field you wish to create a relationship from
* Drag it to the matching field in the other table
* Click **Create**

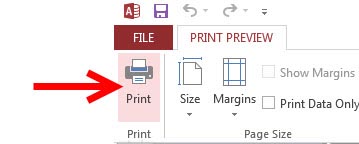


**Print a Table Relationship**

* Click the Database Tools tab
* Click the Relationships Button
* Click the Relationship Report Button on the Design tab



* Click the **Print** button

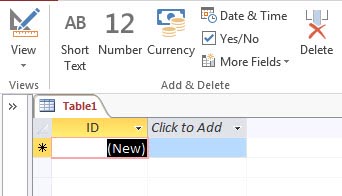


**MANAGING DATA**

**Add Records to a Table**

To add a new record to a table:

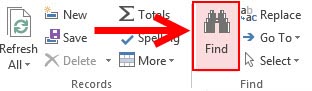
* Open the table in **Datasheet View**
* Click the **New** Cell
* Type in your new record



**Find and Replace**

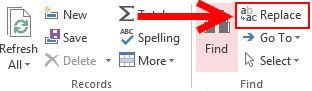
To find data:

* Click the **Find** button on the Home Tab



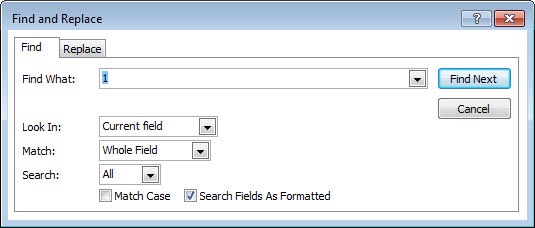
To find and replace data:

* Click the **Replace** button on the Home tab



When you are searching for data for a find, replace or go to, you have several options in the Find Dialog Box.  These options are:

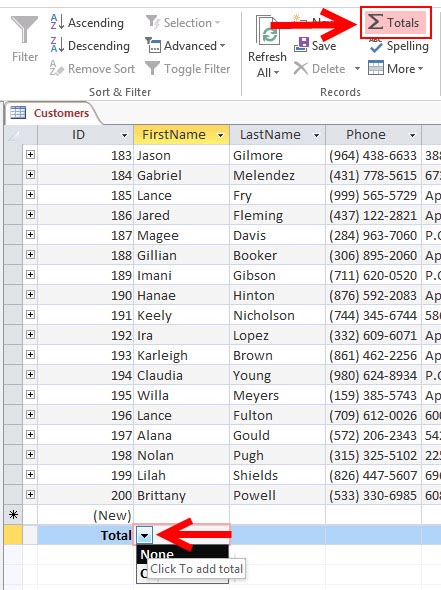
|  |  |
| --- | --- |
| Find What Text Box | Type the text you wish to find |
| Link in Drop Drop-Down List | Use the drop-down list to specify a table or a column to search |
| Match Drop-Down List | Use the drop-down list to narrow down the search to a field or the   beginning of a field |
| Search Drop-Down List | Use this drop-down to specify the direction to search. |
| Match Case Check Box | Use this check box to specify whether to search by the same upper and   lower case letters. |



**Totals**

The totals button provides you the opportunity to add a totals row to your database.  The total can be the sum, average, a count, minimum, maximum, standard deviation, or the variance.  To set up a totals row:

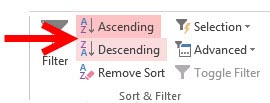
* Click the **Totals** button on the Home tab
* Click the down arrow of the cell where you want the totals
* Click the appropriate choice



**Sort Records**

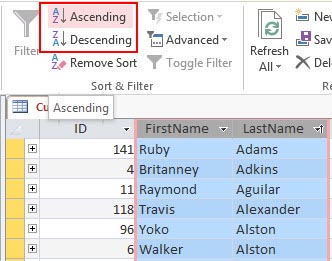
You can sort records in a datasheet by a single column or by two adjacent columns.  To sort records by a single column:

* Select the field you wish to sort
* Click the **Sort Ascending** or **Sort Descending** button



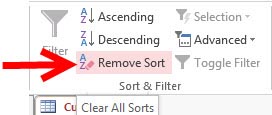
To sort two columns:

* Move the columns to they are adjacent to each other
* Select the desired columns for sorting by holding the shift key and clicking the columns
* Click the Sort Ascending or Sort Descending button



To clear the sort:

* Click the **Remove Sort** button



**Filter**

You can filter records to include only records that you want to display.  To filter by a column:

* Open the database in Datasheet View
* Click the down arrow in the field label
* Choose the appropriate filter criteria
* Click OK

