Microsoft Access 2007
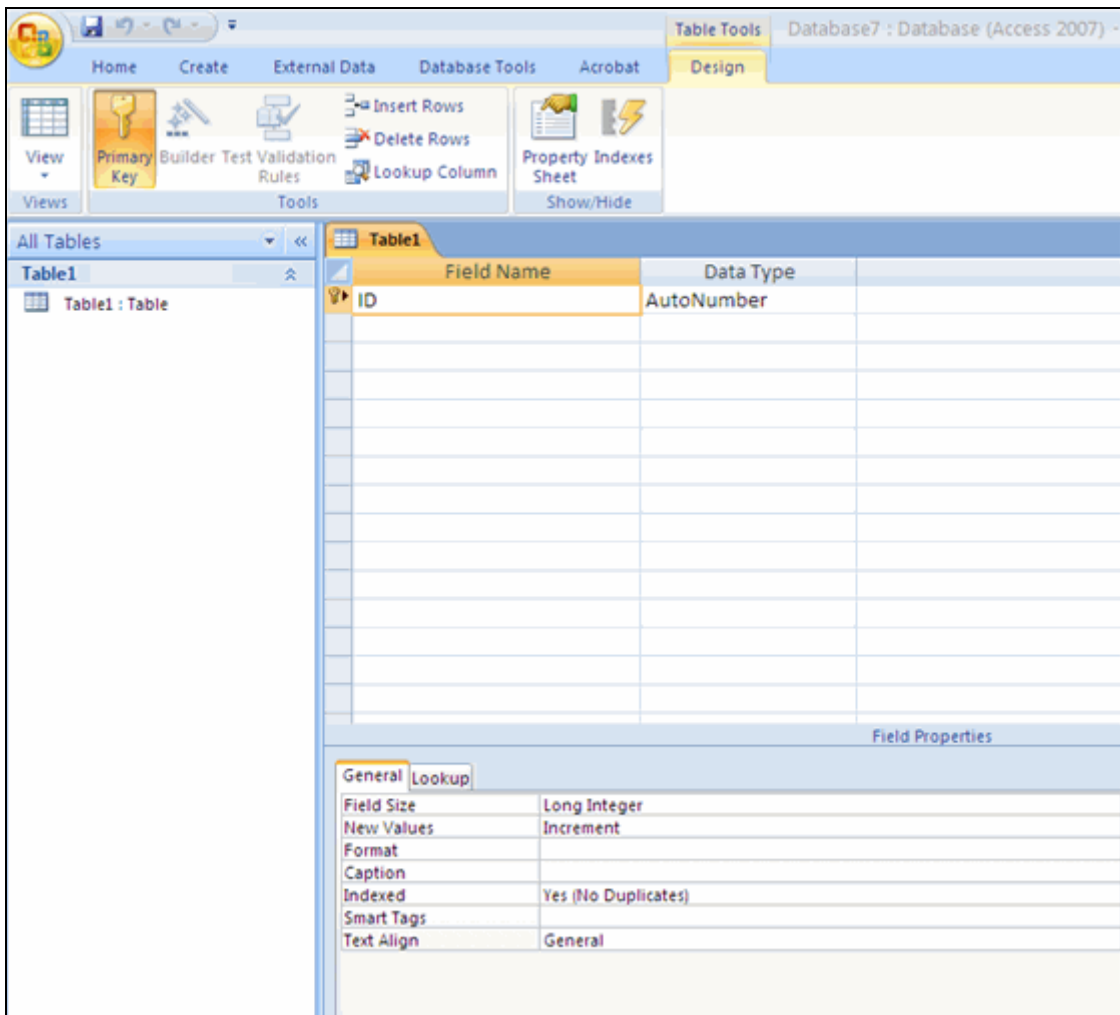
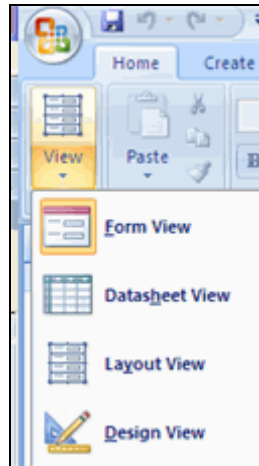## Creating a Table

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.
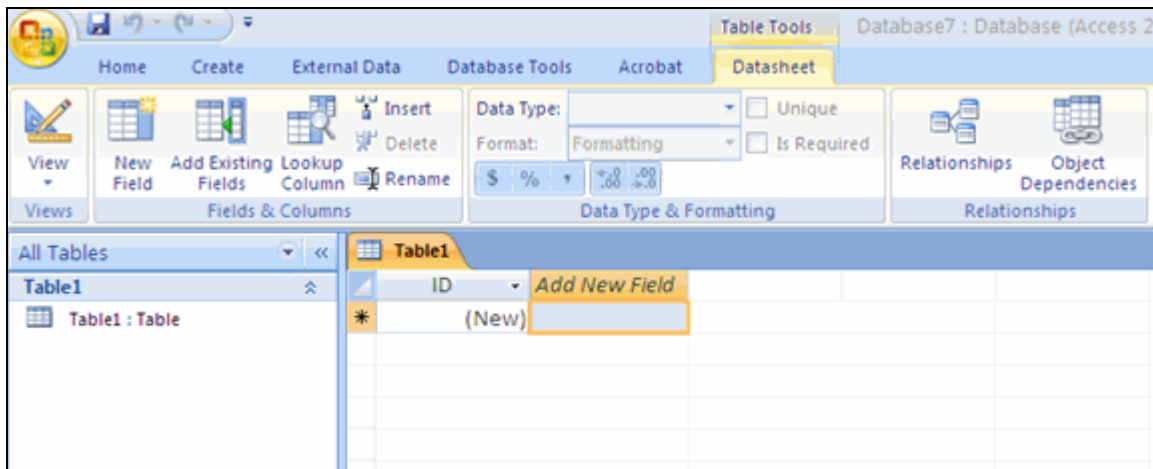

To go to **Design View**:

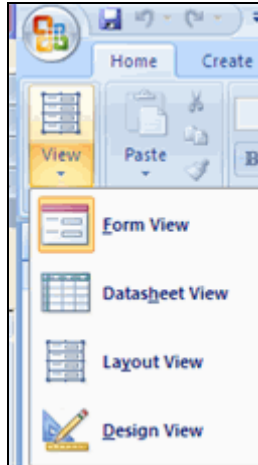- Click the down arrow on the **View** button
- Click **Design View**

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 down arrow on the **View** button
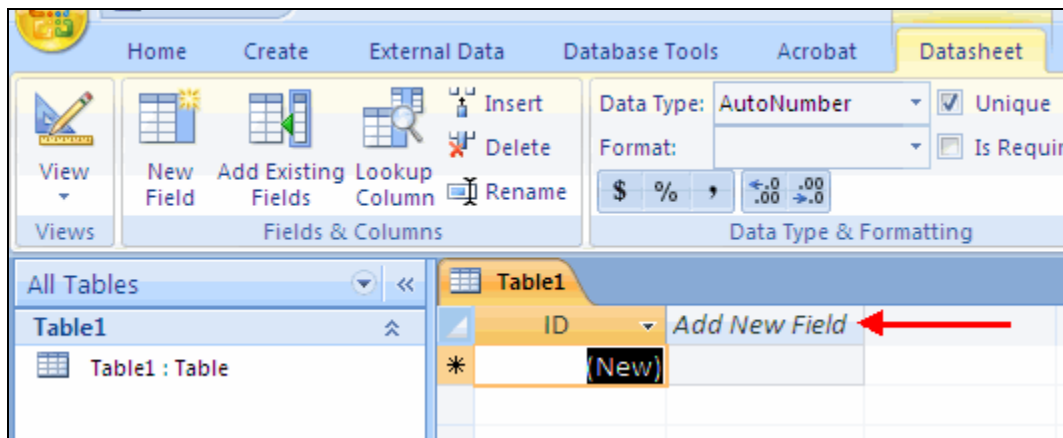- Click Datasheet View

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.

There are two ways to add a new field in Datasheet View: Add A New Field or the New Field Button.
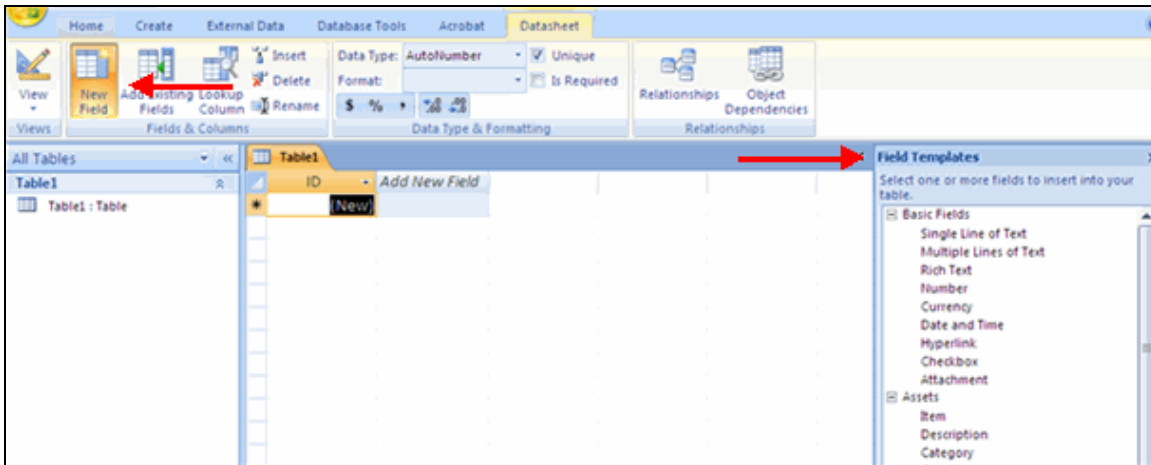
To add a New Field within the Datasheet:

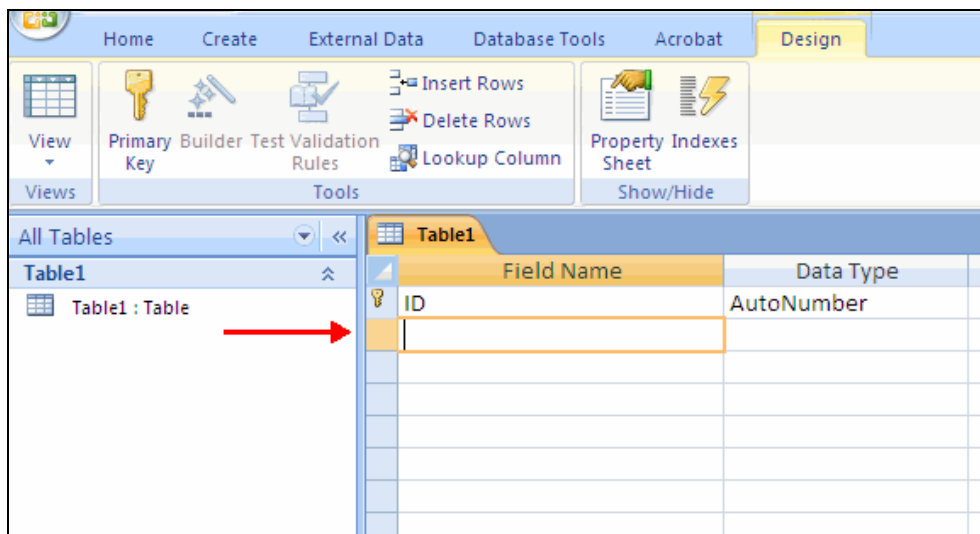- Click the **Add New Field** column

To add a new field by using the **New Field Button**

- Click the **Datasheet** tab on the Ribbon
- Click the **New Field Button**
- Choose the type of field you wish to add from the **Field Templates** window

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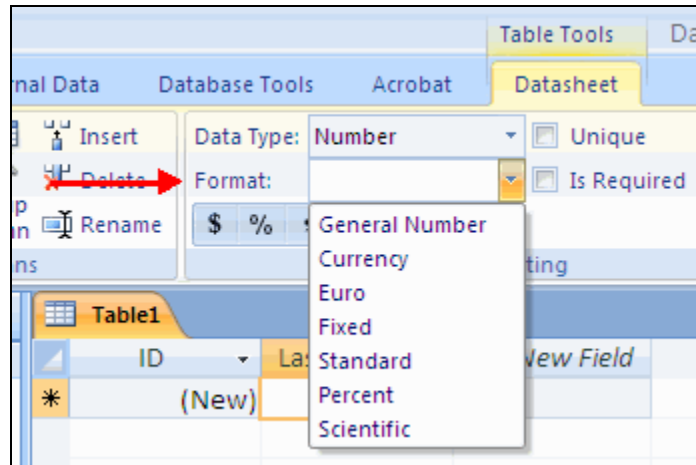
To edit the **Data Type** in **Datasheet View**:

- Click the field you wish to define
- Click the **Datasheet** tab on the Ribbon
- Click the down arrow next to **Data Type**
- Choose the type of data that will be entered into the field
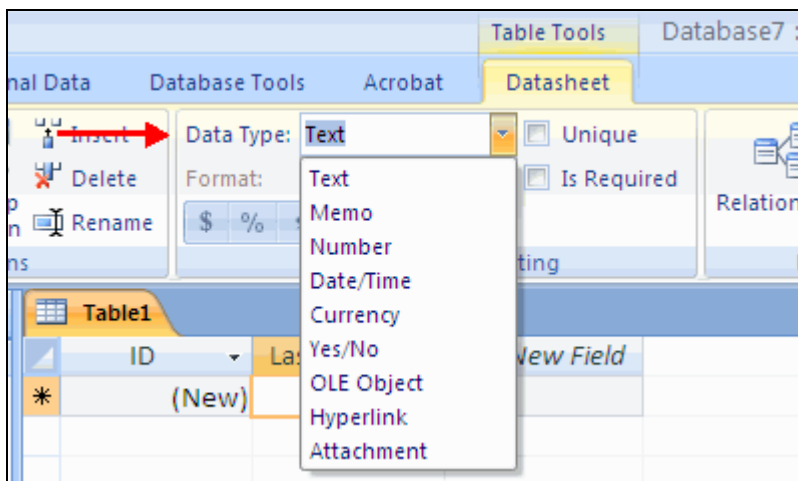
To edit the format of the data:

- Click the field you wish to define
- Click the **Datasheet** tab on the Ribbon
- Click the down arrow next to **Format**

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

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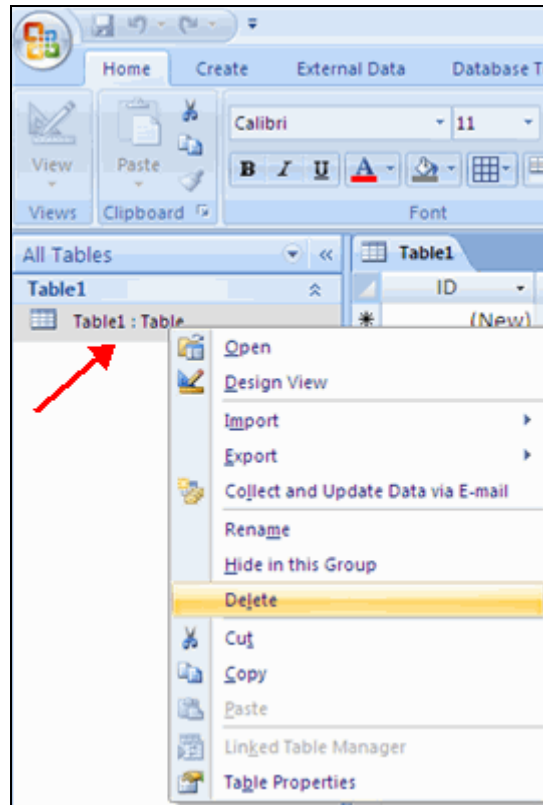- Format the field in the **Field Properties Dialog box**
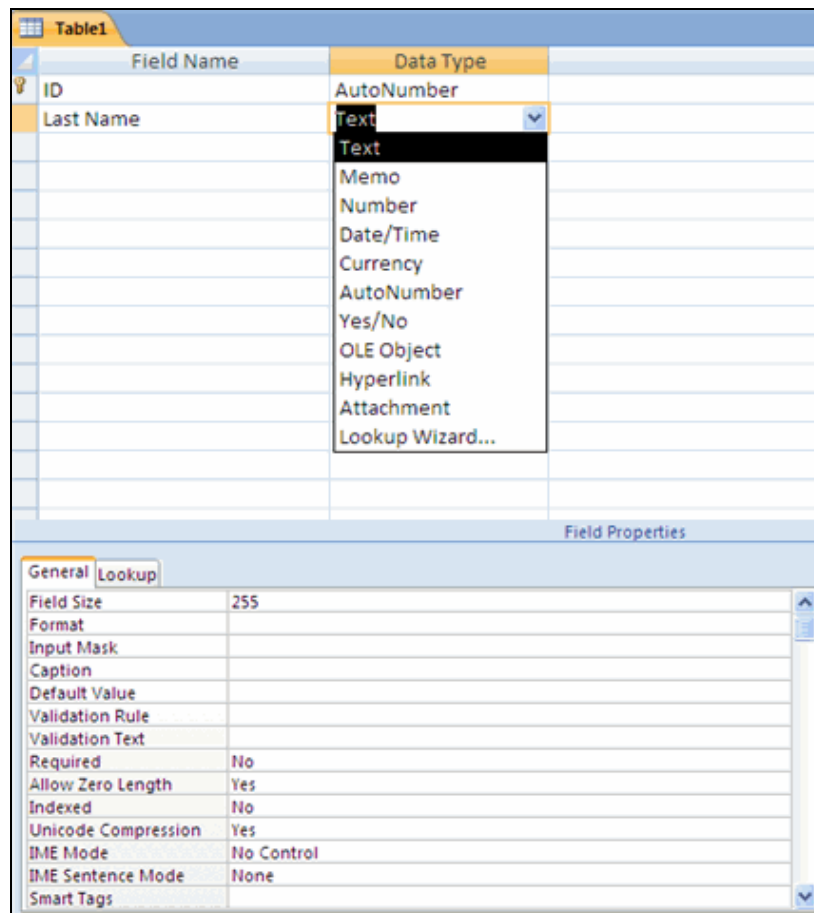
Managing Tables

Delete a Table

To delete a table:
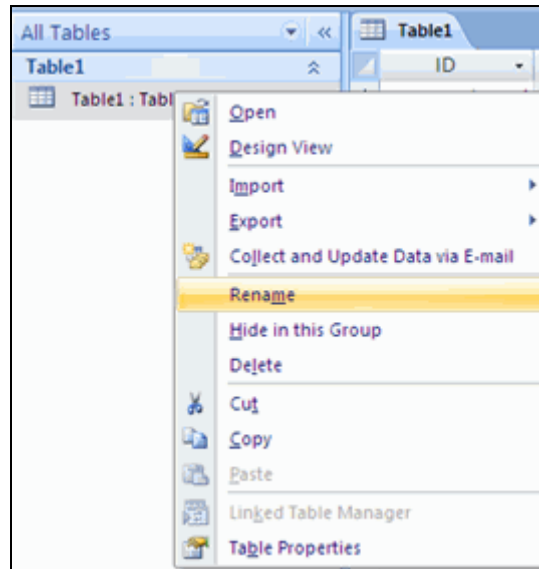
- Open the desired database by clicking the **Microsoft Office Button** and clicking **Open**
- Right click on a table and choose **Delete**

**Rename a Table**

To rename a table:

- Open the desired database by clicking the **Microsoft Office Button** and clicking **Open**
- Right click on a table and choose **Rename**
- Type in the new name

Add a Description to a Table
To add a description to a table

- Open the desired database by clicking the **Microsoft Office Button** and clicking **Open**
- Right click on a table and choose **Table Properties**
- Click the **Description** text box
- Type in the description
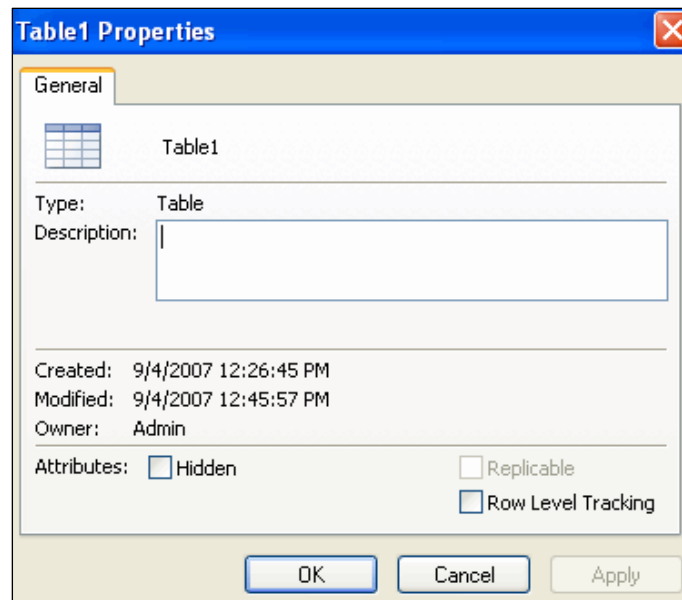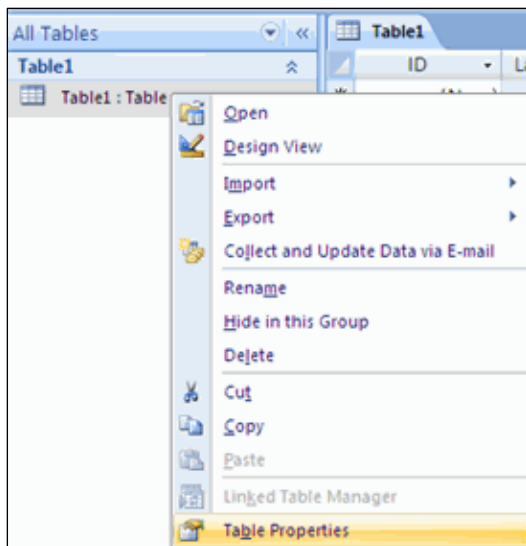
Table Relationships

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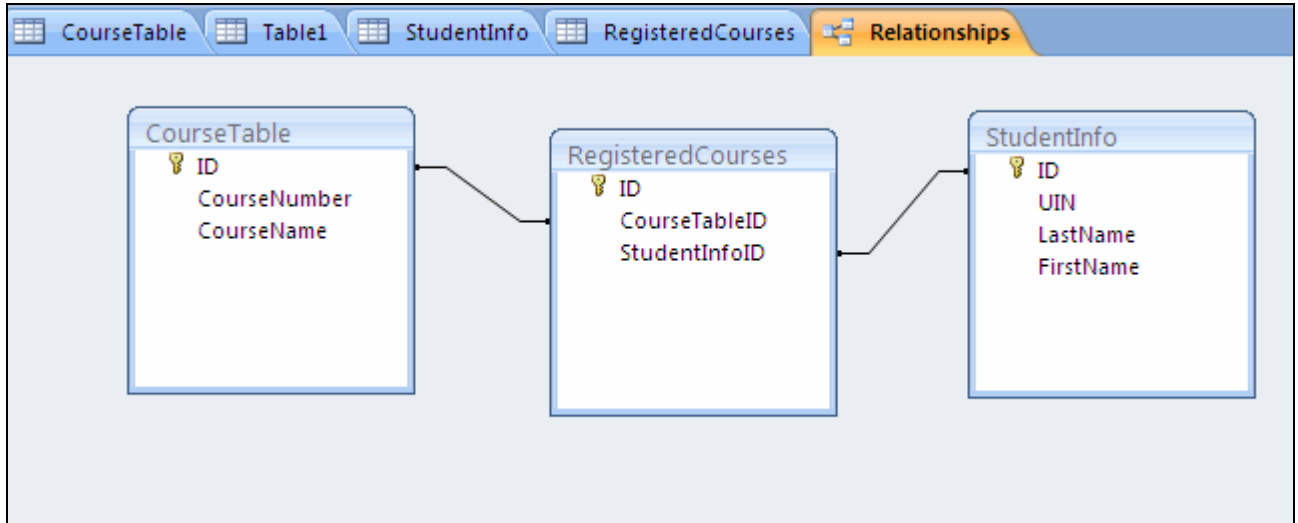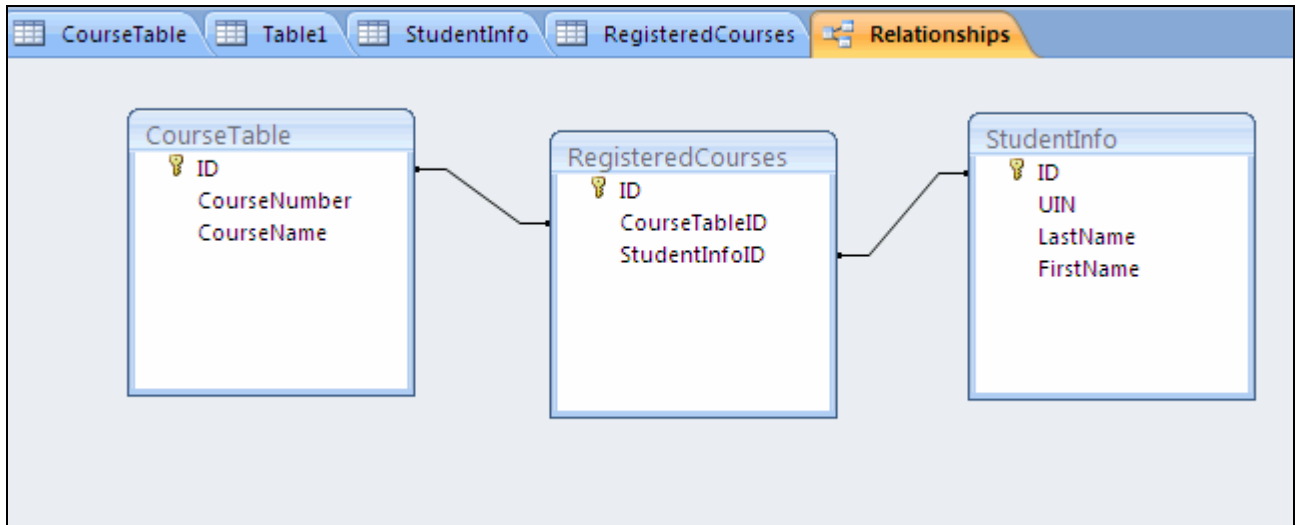

One-to-One Relationship
A one-to-one relationship is between two tables where the primary key in one table and the foreign key in another table are the same. For each record in the first table, there is a single matching record in the second table.
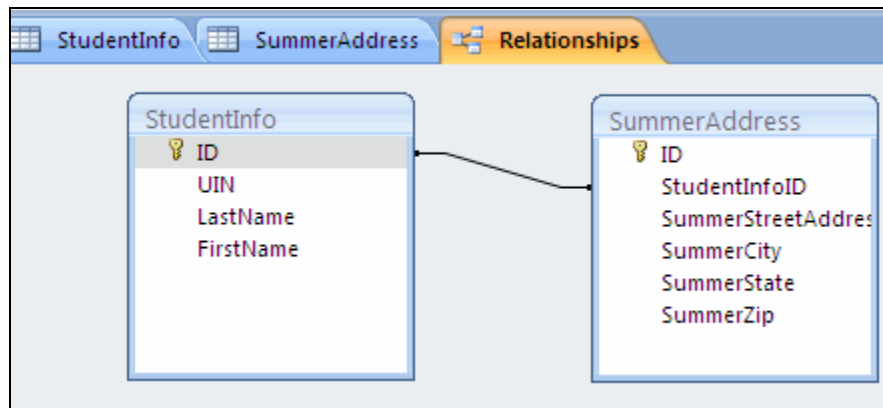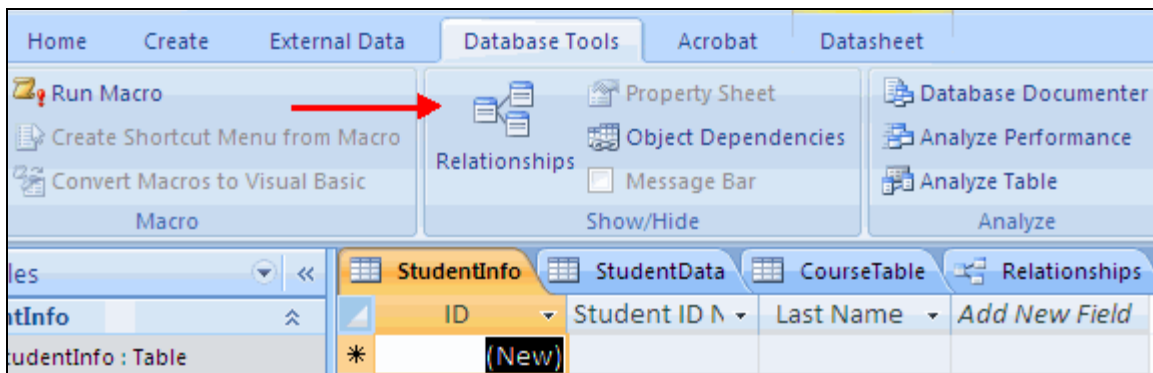

One-to-Many Relationship
A one-to-many relationship occurs between two tables where the primary key in one table can be duplicated many times in another table
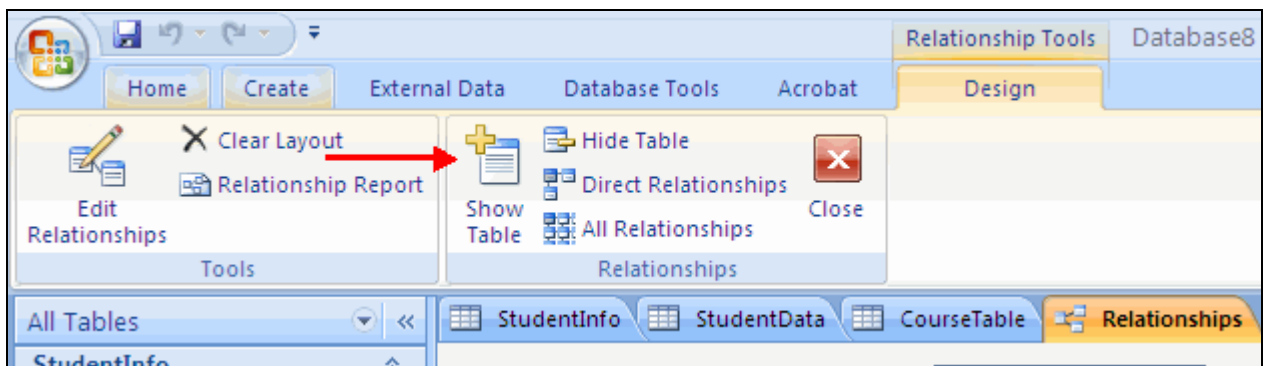
Creating Table Relationships
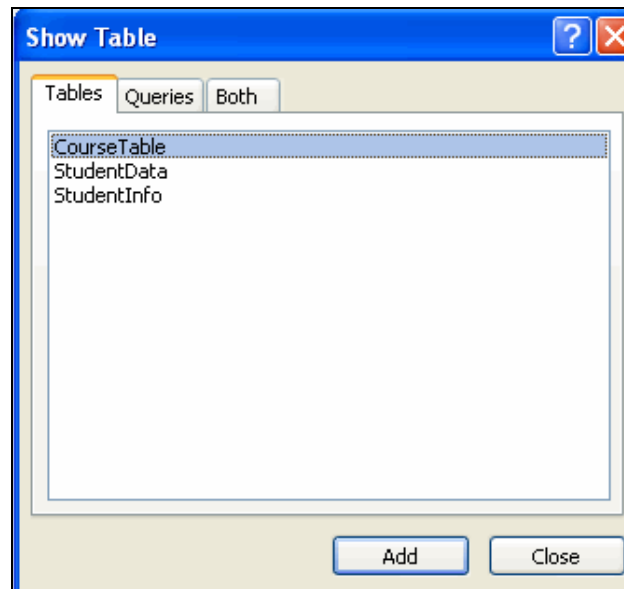
To create relationships between tables:

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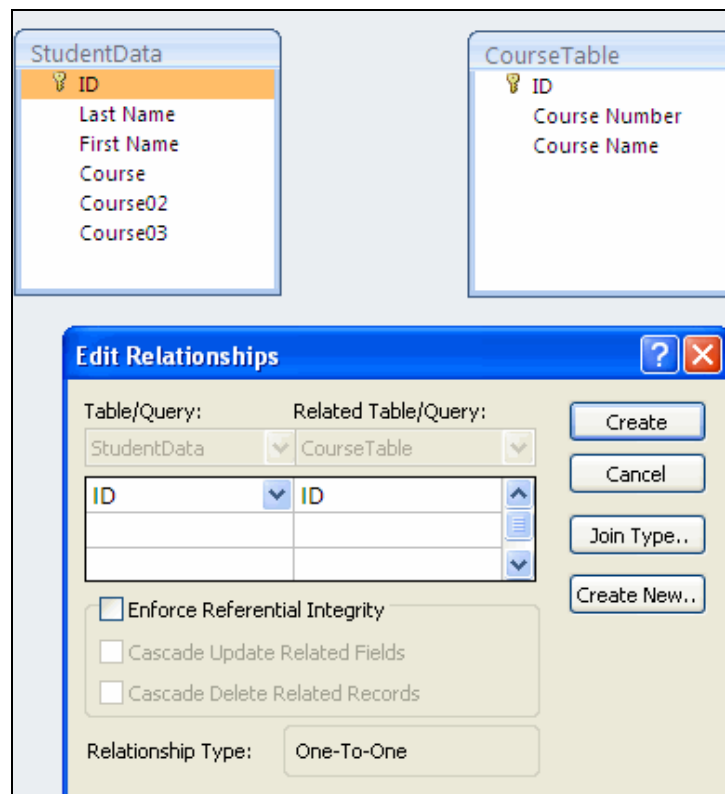- Click the **Relationships** button

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

- Select the desired tables
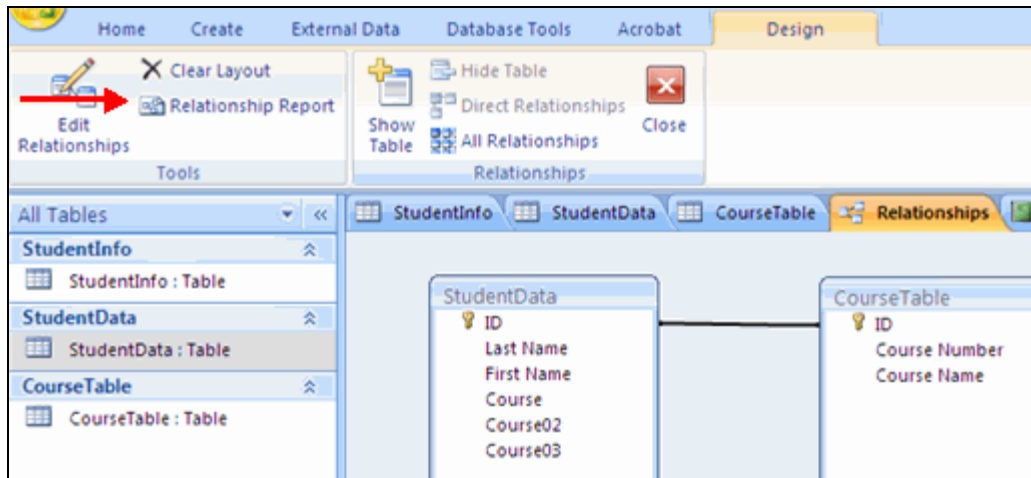- Click **Add**
- Click **Close**

- 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