**Validation/Verification**

There are three main ways of trying to minimise data entry errors that you need to be aware of. They are:

* **Combo Boxes** (drop down boxes)

These are a form of data entry that are set using the Lookup Wizard in the Data Type option.

* **Validation Checks**

Setting acceptable limits for data, for example M Or F for Male or Female in a field.

* **Input Masks**

Setting rules for the type of characters that can be entered into a field.

You can also set a Default Value for a field, which will be entered automatically, to minimise typing.

**Validation Checks**

Validation checks are set by adding a Validation Rule to the Filed Properties box at the bottom of the design view of a table. You can also add an error message to be displayed if a user enters data that does not match your rule.

Use **>** (greater than) and **<** (less than) signs, together with **And** and **Or** to create validation rules for numbers (including currency and dates), for example:

* **>0** means ‘must be greater than 0’
* **<250** means ‘must be less than 250’
* **>0 and <250** means ‘must be greater than 0 but less than 250’, example, must be between 1 and 249
* **<5 Or >**10 means ‘must be either less than 5 or more than 10, example, must not be between 5 and 10
* **>=01/01/2013 And >=31/12/2013** means ‘must be greater than or equal to 01/01/2013 and less than or equal to 31/12/2013, example, must be a date in 2013.

There are some useful functions that you can use when setting validation on dates.

* **Date()** represents today’s date
* **Month(Now)** represents the current month
* **Year(Now)** represents the current year

We can use **Or**, **Not** and **?** to add checks to text fields. For example:

**M Or F** is an alternative way of allowing only ‘M’ or ‘F’, rather than using the Lookup Wizard. This method would not provide a combo box for data entry.

**A\*** means that the data entered must start with A.

**A\* Or B\*** means that data entered must start with either A or B

**A?????** means that the data must start with A and then have another 5 characters

**NOT Word** means that any data can be entered except the word Word.

**Input Masks**

Input Masks are set by adding a code to the Input Mask section of the Field Properties box at the bottom of the design view screen. These codes define the type of character that can be added.

The codes are as follows:

**0** – a single numeric digit, which must be entered

**9** – a single numeric digit, which may or may not be entered

**#** - a single numeric digit or a + or – sign, which may or may not be entered

**L** – a single letter of the alphabet, which must be entered

**?** – a single letter of the alphabet, which may or may not be entered

**A** – a single character (a letter or numeric digit), which must be entered

**a** - a single character (a letter or numeric digit), which may or may not be entered

**&** - any character or space, which must be entered

**C** – any character or space, which may or may not be entered

**<** - converts any letters that are entered after it to lower case

**>**- converts any characters that are entered after it to upper case

**\** - used before a character in a mask to show that this character should appear in the final data (in the masks for postcode and telephone numbers it is used before a space)