A simple analysis using Minitab

The small dataset introduced in the document about running Minitab for the first time was

Height	Weight	Sex
95	15.3	0
101	16.7	0
99	14.9	1
108	17.3	0

Open Minitab and either re-enter the data or, if you saved the worksheet you created at that time, retrieve it using the instructions in the previous document.

All we will attempt to do is calculate the average height. This can almost be done mentally, as it is (95+101+99+108)/4 = 403/4 = 100.75 cm.

To get Minitab to do this, click on <u>Stat</u> and then on <u>Basic Statistics</u>. and then on <u>Display Descriptive Statistics...</u>. You will then be presented with the following screen



This form of screen will become very familiar over the next few weeks. The **Display Descriptive Statistics** dialogue box is very similar to the boxes which appear when any technique is requested in Minitab.

The main features of the box are the two windows: one lists the columns in the Worksheet[†] and the other, <u>V</u>ariables:, is the box in which you need to enter the columns which you want analysed.

In this case, we want to analyse C1, the column of heights. How can we enter this column into the <u>Variables</u>: box? It would be nice to drag and drop C1, but in all the version released so far Minitab have not allowed this. There are three ways.

- 1. Double-click on C1 in the left-hand box.
- 2. Click on C1 in the left-hand box and then click on Select
- 3. Click in the <u>Variables</u>: box and type either the name of the column, Height, or C1.

This gives the following screen

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To perform the calculations, click on OK.

The other boxes can also be useful. The **Graphs...** box will be encountered next week. The **By variable:** box will not be considered at this stage.

If you click on **Help** you will be given context-specific help, i.e. you will be given help about the **Display Descriptive Statistics** command. If you were in the box for another command then **Help** would offer help on that command.

Clicking on **OK** gives the following screen.

[†] Strictly, only those columns that are relevant to the analysis being requested are shown. As you cannot compute descriptive statistics about text, any text columns in the worksheet would not be displayed.

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2	101	16.7	0							
3	99	14.9	1							
4	108	17.3	0							
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The command has produced several quantities and the important ones amongst these will be explained in the weeks to come. For now it is sufficient to note that the average (or *mean*) is, as calculated, 100.75 cm.