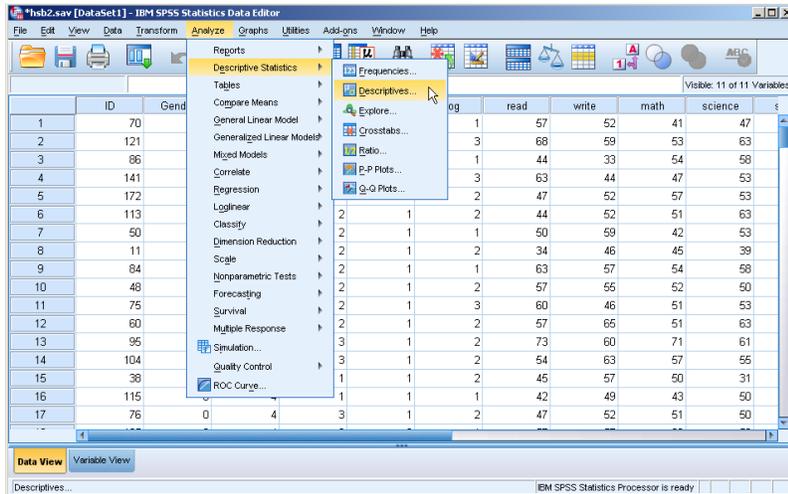# Guideline 2_SPSS: Data manipulation

How to select cases

This is one of the most common functions used in data manipulation. Using this function you can split up the dataset based on some grouping. Let us start with an example. Imagine you want to calculate the mean math score of students. Using the hsb2.sav dataset, first, go to Analyze> Descriptive
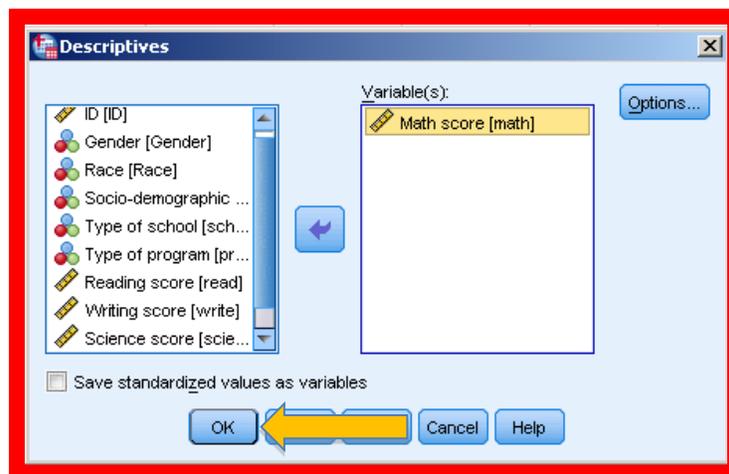

This is a magnified picture
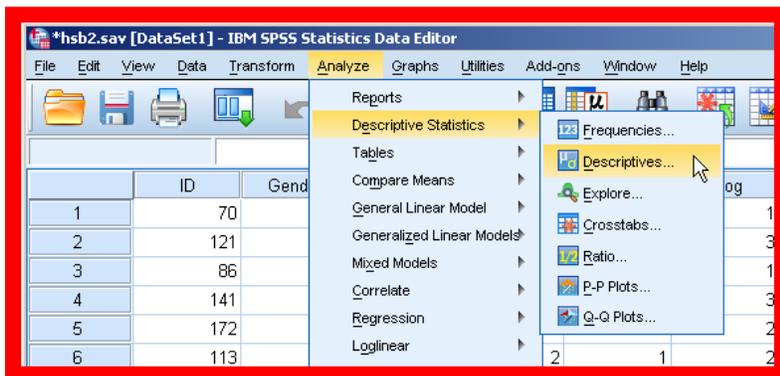
When you click on "Descriptive" a new menu will be opened for you where you will see a list of variables on left hand side and an empty box on the right hand side.
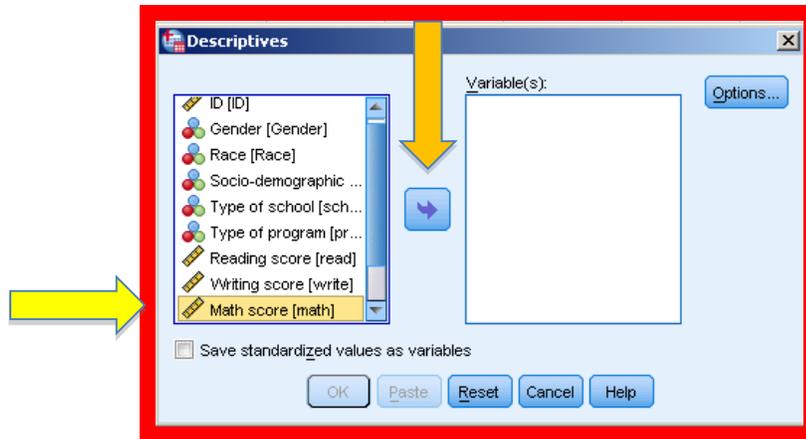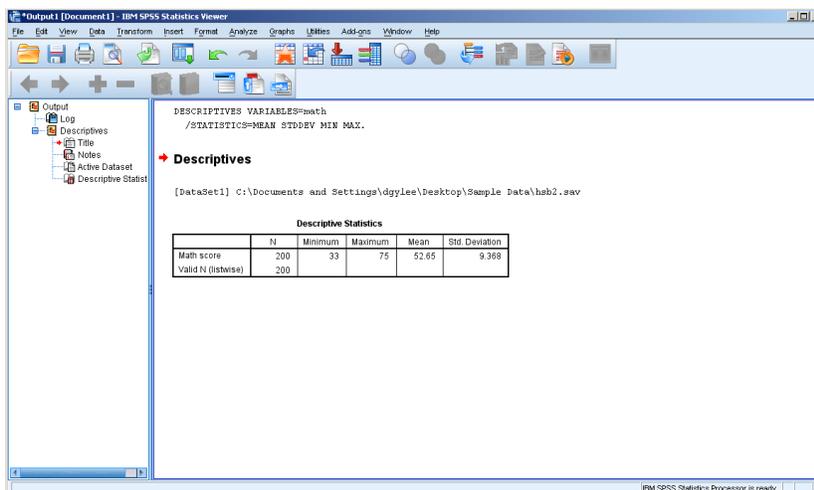
Select the variable math from the left box and using the arrow (as shown by orange arrow), push it to the empty box.

Now click OK

A new file will be opened that is called "output file".

This file should be saved seperatly. Use a name familiar to you and save it to a folder with the name of the project, with date and time of analysis, so that you can always remember what and when did you analyse.

You asked SPSS to decribe the varaible "math" and what you see on the outfile shows the results. Note that the number of participants is "200". The mean of math score is "52.65" and the standard devision is 9.368.

Now, if you want to see the descriptive of math score for "femal" students ONLY, what should you do?

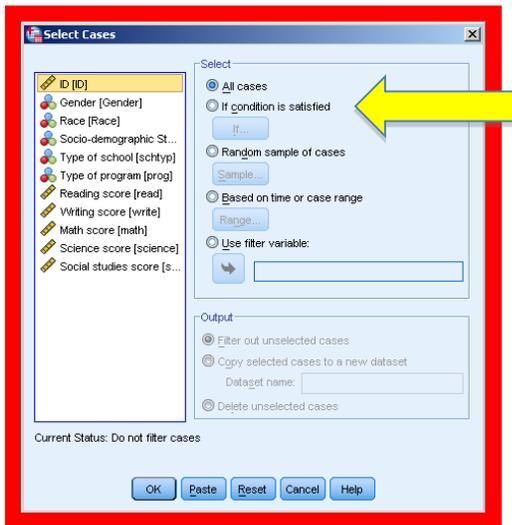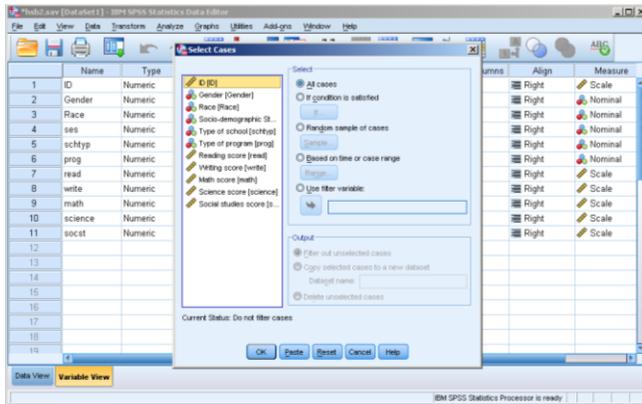Th answer is "select cases". Youshould select cases that are female ONLY. Looking into variable view, you recall that the varaible female is coded as 1. With this in mind, go to Data>select cases
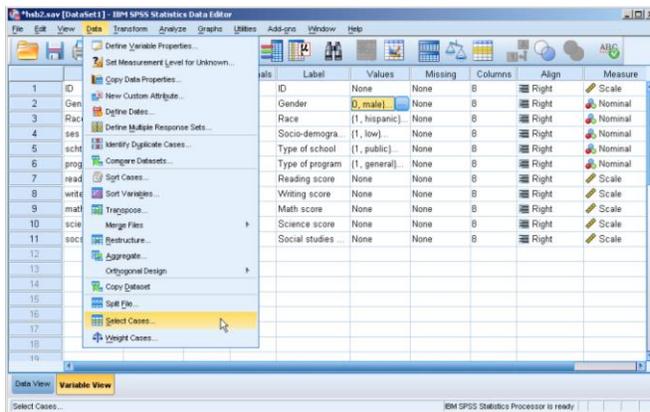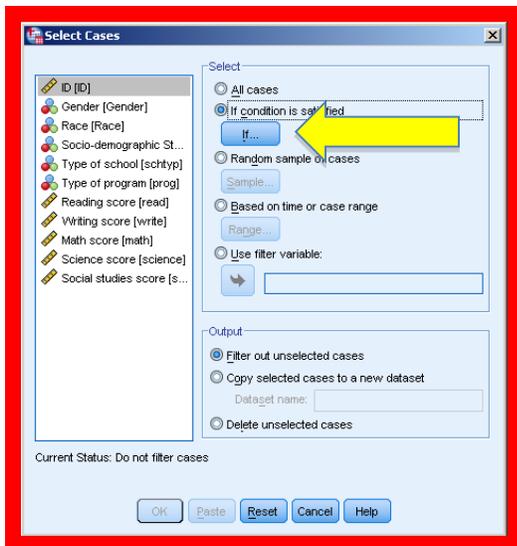

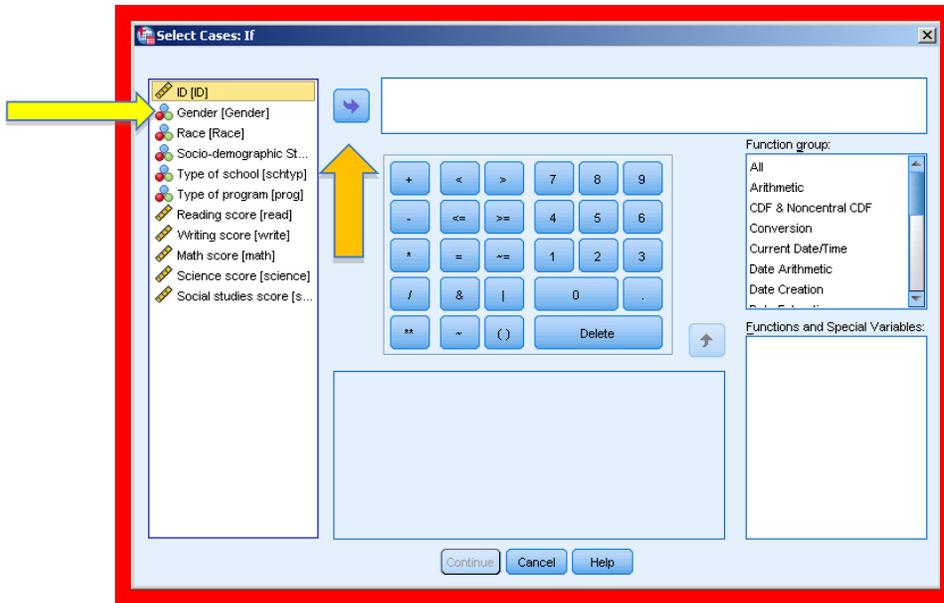Here is a magnified picture
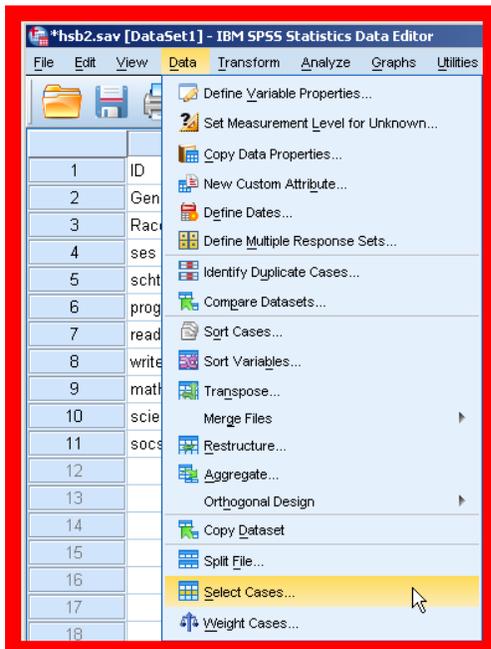
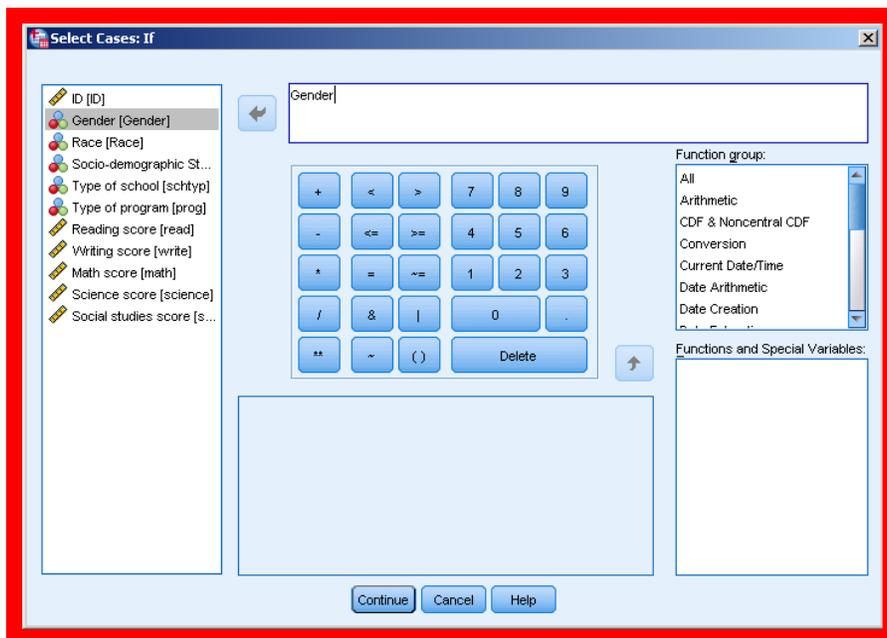When you click on "select cases, a new menu will be opened as below:

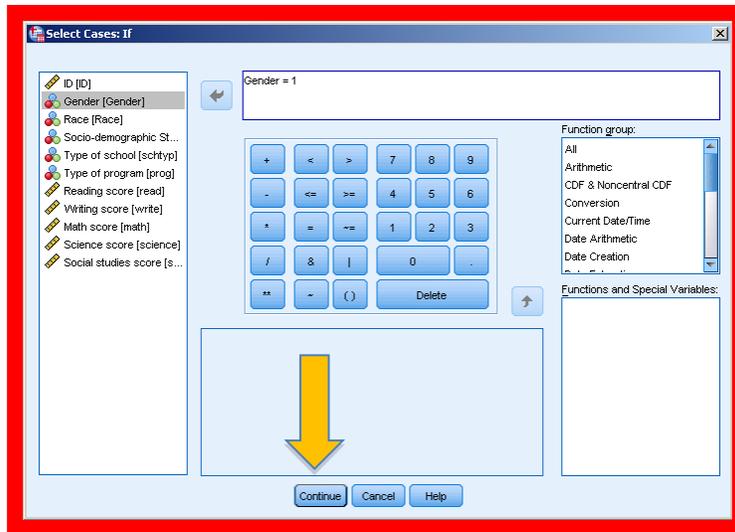Select "if condition is satisfied. The key "if" will be highlighted


Click on "if" key

Now you will see another menu where you can select the variable of your interest, in this case, Gender. Using the arrow (AS shown with orange arrow) push the variable to the empty box.
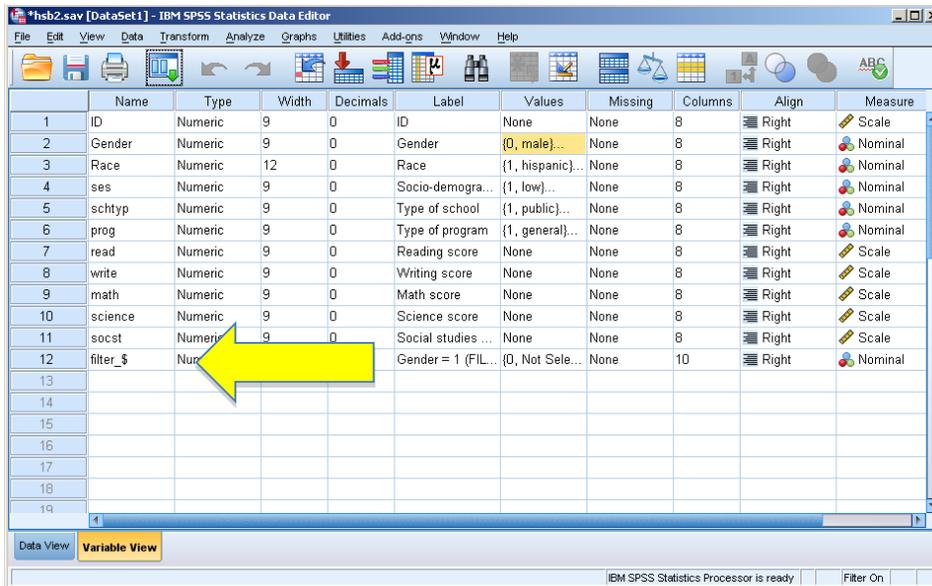

Now in the box, close to Gender, type =1

This means that you are selecting cases that are coded as 1, which are the females ONLY. Click "continue". You will be returned to the previous menu. However, this time, you and see that Gender =1 appears close to the "if" box.
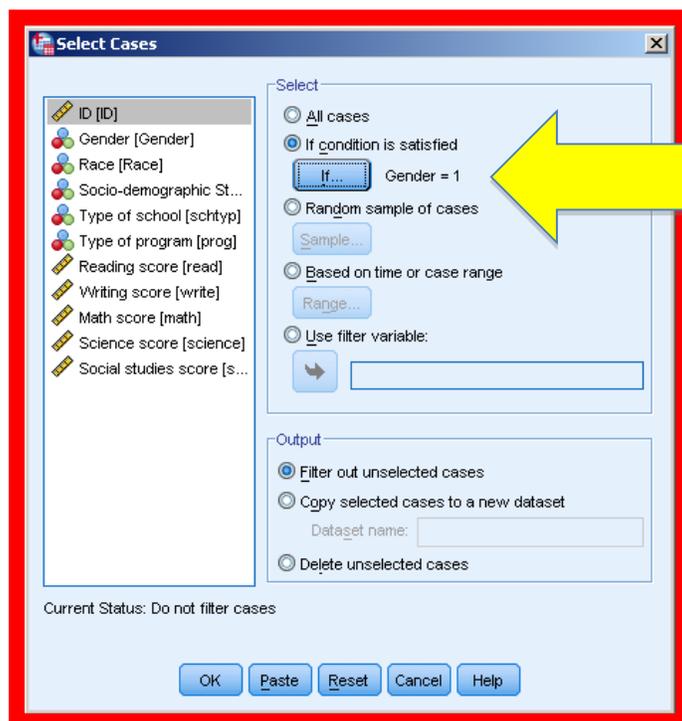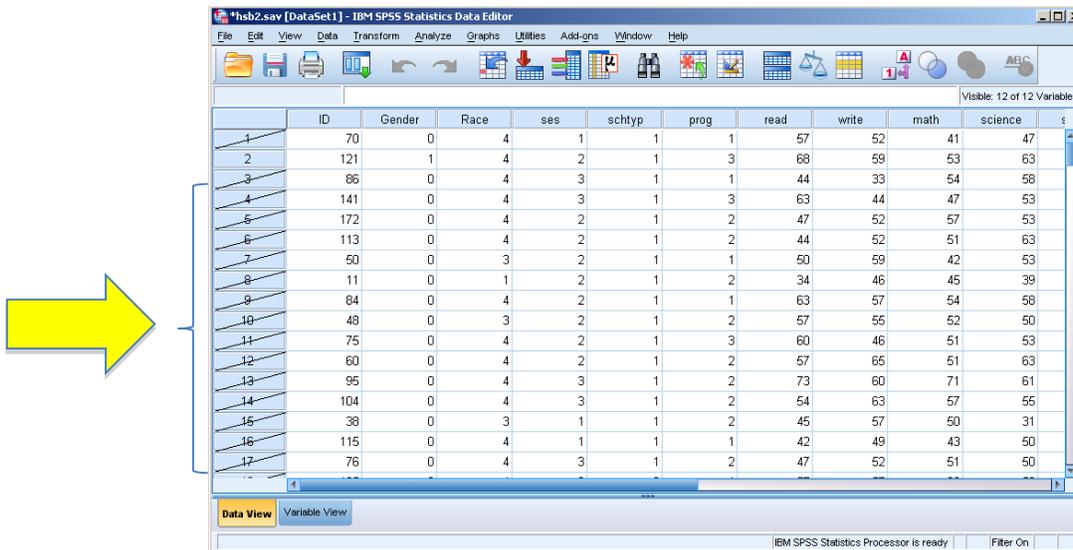

You can now, click OK and go back to the variable view.

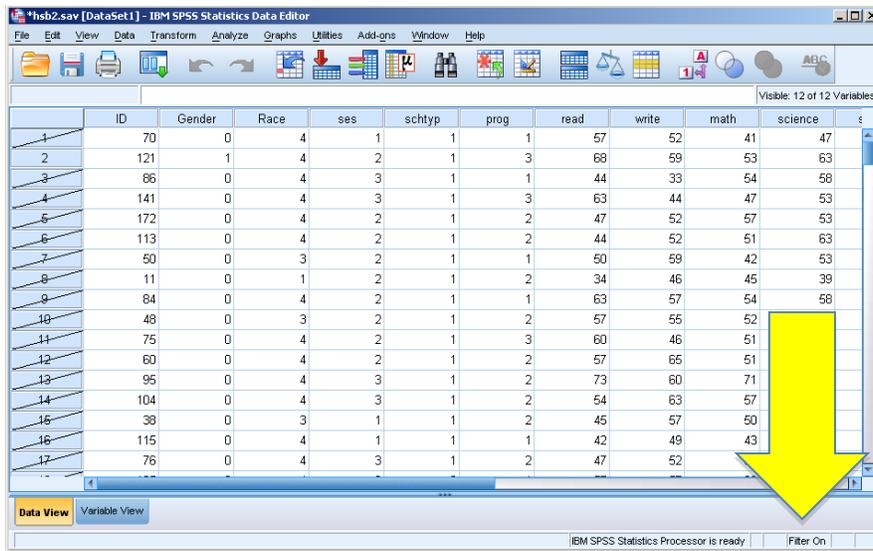Do you see a new variable entitled "filter_$ at the end of variable's list?

To verify that males are excluded from analysis, you can also go to data view and note that males are scratched out.
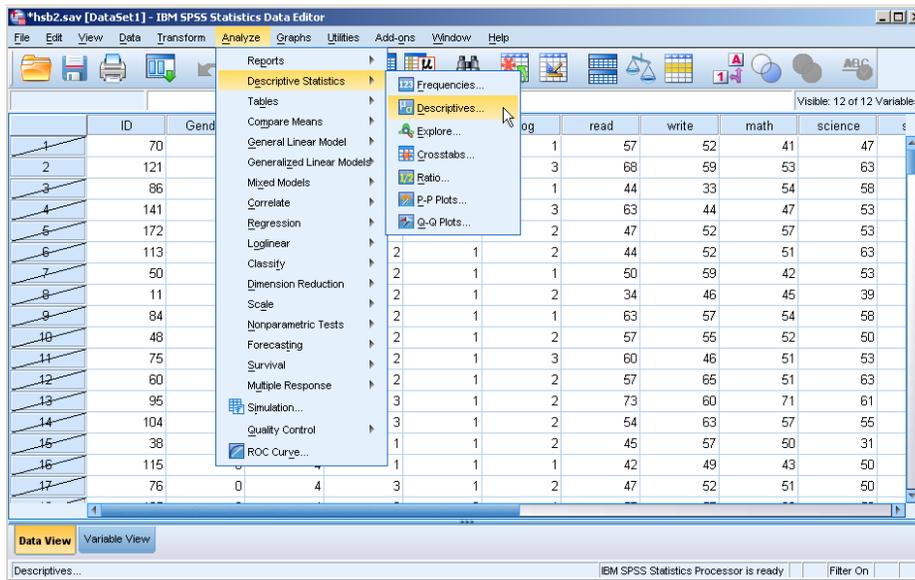

For example, data ID 70 was male and is excluded (scratched out) of the data.
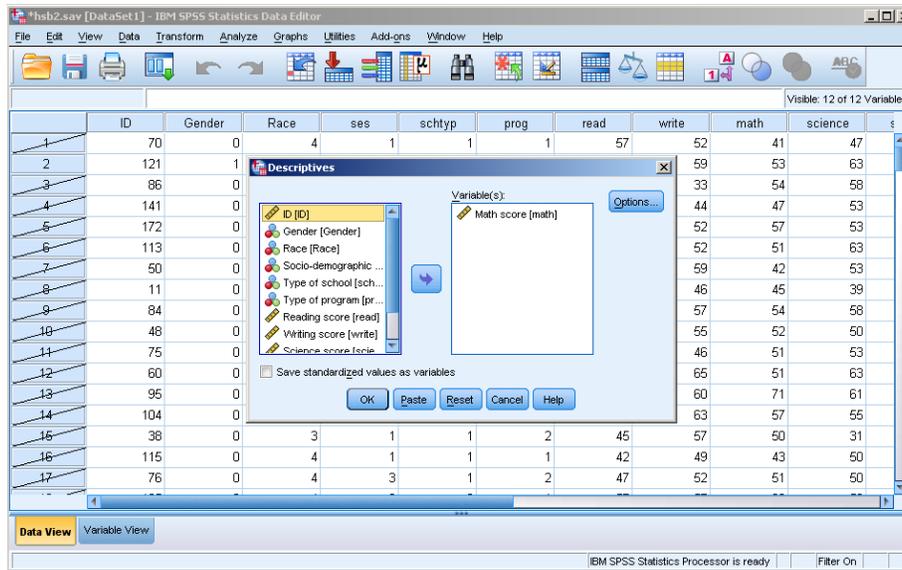

Another alert is the appearance of "filter on" text at the bottom of the data variable screen.
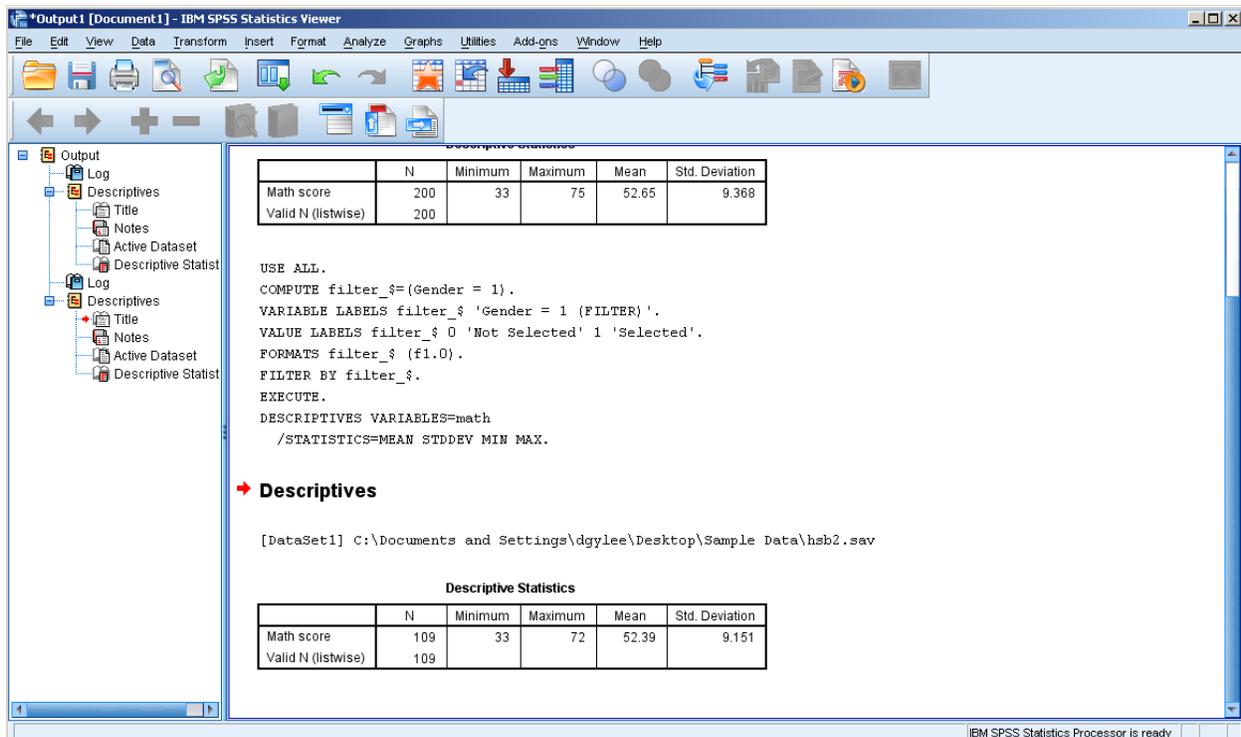
Next, you have to describe the math score again. See what happens this time when you analyse math score among females ONLY.

The variable math is already on the box because you have done this before.

S soon as you click on OK button, you will be take back to the output file where you can see the description of math score for females ONLY.


Observe that the average of math score for females is 52.39 and standard deviation is 9.151. Compared to previous value, he average of math score among females is a few points lower than the total population.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Math score	109	33	72	52.39	9.151
Valid N (listwise)	109				

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Math score	200	33	75	52.65	9.368
Valid N (listwise)	200				

Please note that unless you turn the filter OFF, everything you do, will be done on the female data ONLY.
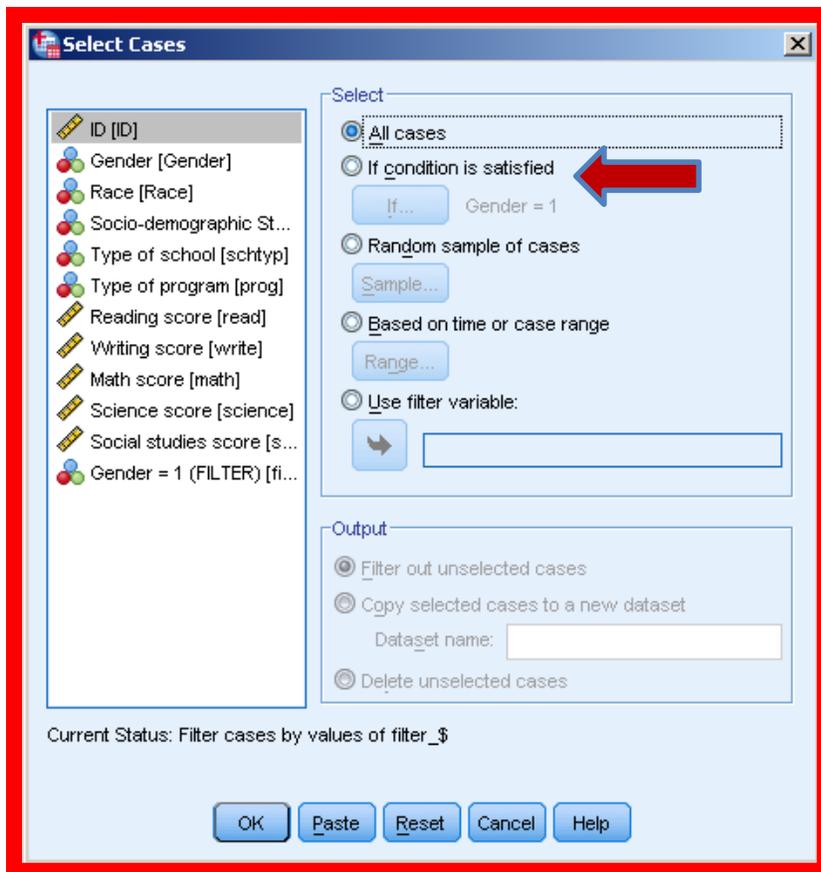
To turn off the filter, go back to Data>select cases
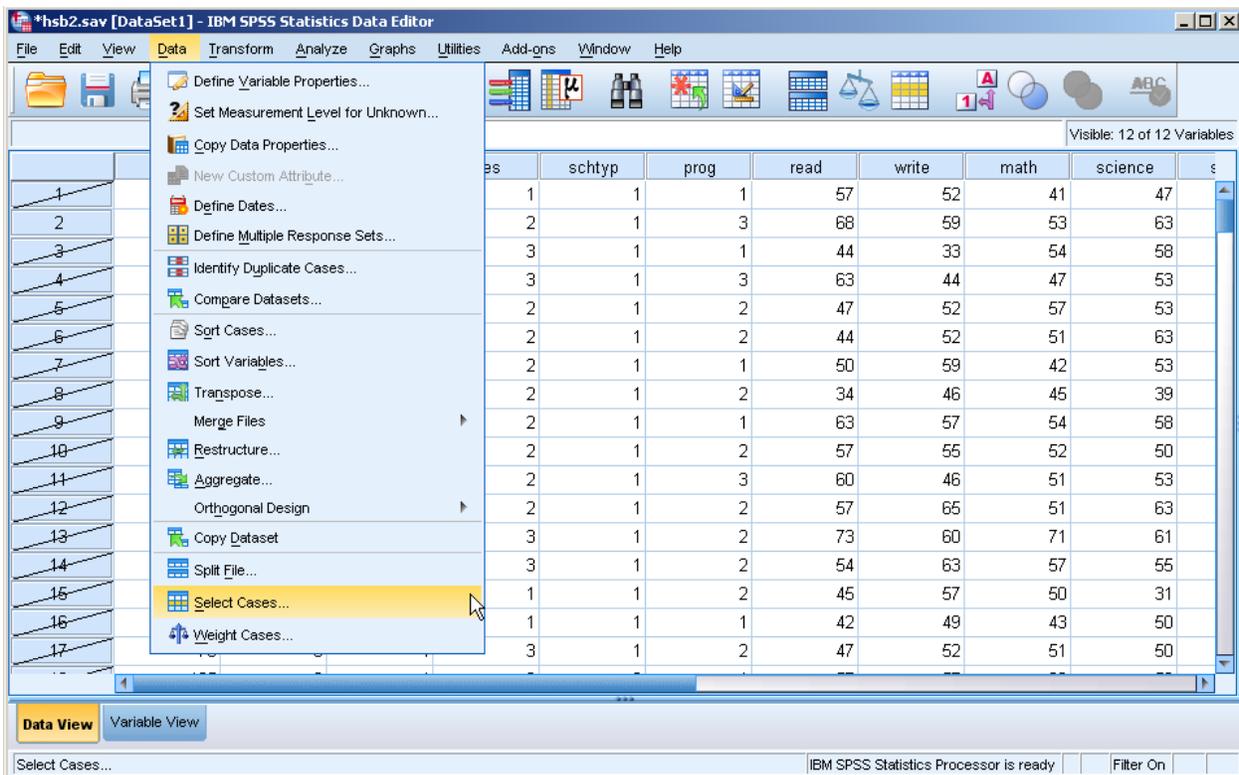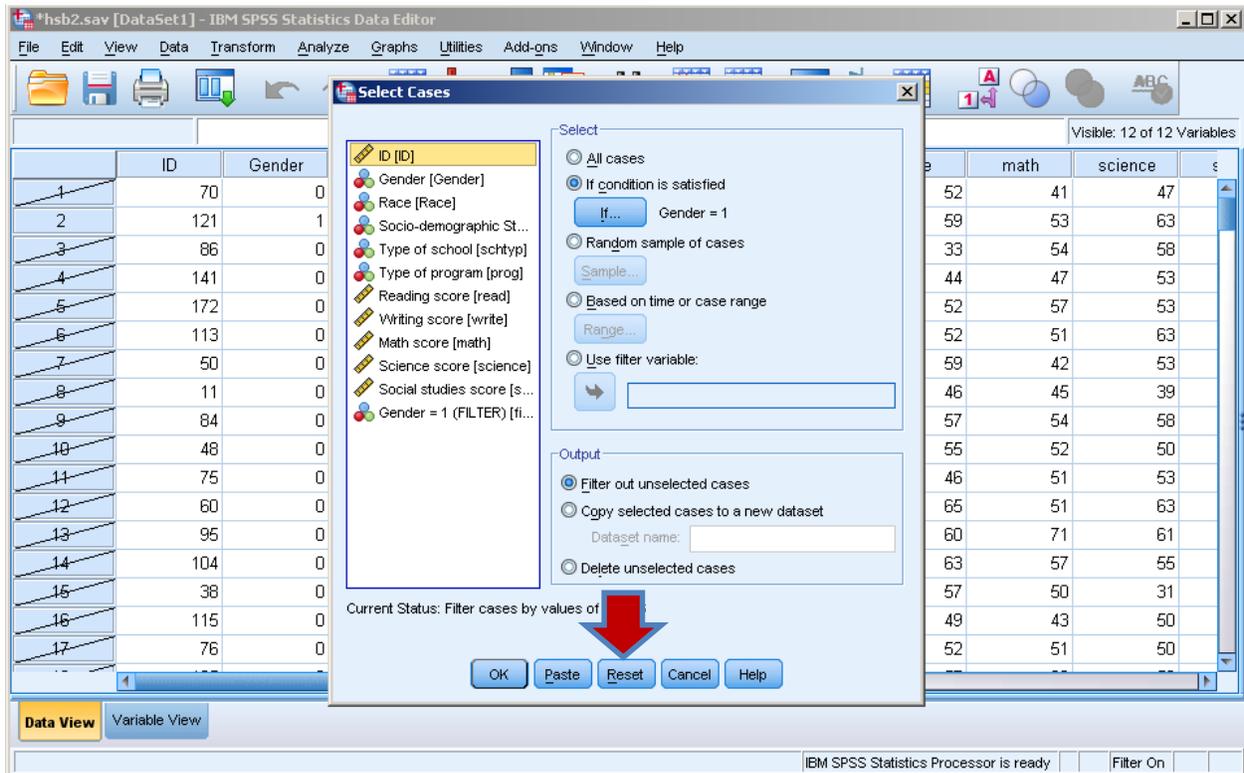
Click on Reset.

Alternatively, you can click on "All cases"

Make sure that the filter is off. Go back to the data view and observe that all data are included (no scratched data).

Text yourself: Can you find the average for boys?