

Block 1: From questionnaire to SPSS saved file**1.4.1 Labelling your variables in SPSS**

[23 November 2010]

Previous sessions: **1.3.3.7**, **1.3.3.8** and tutorial **1.3.3.9****VARIABLE LABELS**

Once you have defined your variables, fed the raw data into SPSS and created the first edition of your SPSS saved file **myclass1.sav**, you can proceed to enhance your data dictionary by adding labels to your variables and also to the values within variables, so that tables and other output can be more easily understood. If you do this carefully, much of your output will be ready for copying direct into reports with little or no need for subsequent editing.

The **VARIABLE LABELS** command allows you to write text which will appear in screenshots and output exactly as typed. A variable label applies to only one variable, which must have been previously defined. The label itself may be up to 255 characters in length, should be enclosed in single primes (apostrophes) and can contain any printing characters. In practice you'd be better to stick to a much lower limit than 255 and keep crucial distinguishing information at or near the beginning of the label so that you can see it clearly in the **Data Editor** in **Variable View**.

General format:

```
VARIABLE LABELS  <variable name1> ' <variable label1> '
                   / <variable name2> ' <variable label2> '
                   / ~ ~ ~ ~ .
```

Example:

```
variable labels    sex  'Q98a Sex of respondent'
                   / v759 'Q96a Should homosexuals teach in school?' .
```

Some SPSS manuals and textbooks put slashes at the ends of lines and also concatenate lines so that more than one label appears on a line. This is aesthetically horrible and difficult to read. My preference is to put each new specification on a new continuation line with the slash at the beginning of the sub-command.

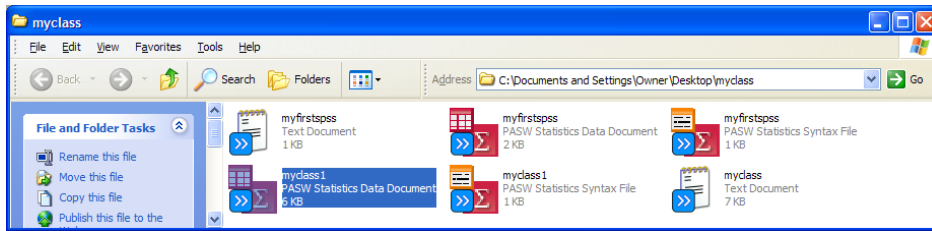
The 1987 - 1990 Norusis textbooks (still the best) follow the same conventions on this. It is also easier to see what you've written this way, but remember, you must have **at least one space** at the beginning of each new specification line (beginners are advised to use several spaces) not only to keep your commands, sub-commands and specifications visually separate, but also to make mistakes easier to spot and correct.

As you see, you can use both upper and lower case letters. The Windows version of SPSS is case insensitive except for comments and user-written labels contained in primes. I invariably write the question number at the beginning of each variable label.

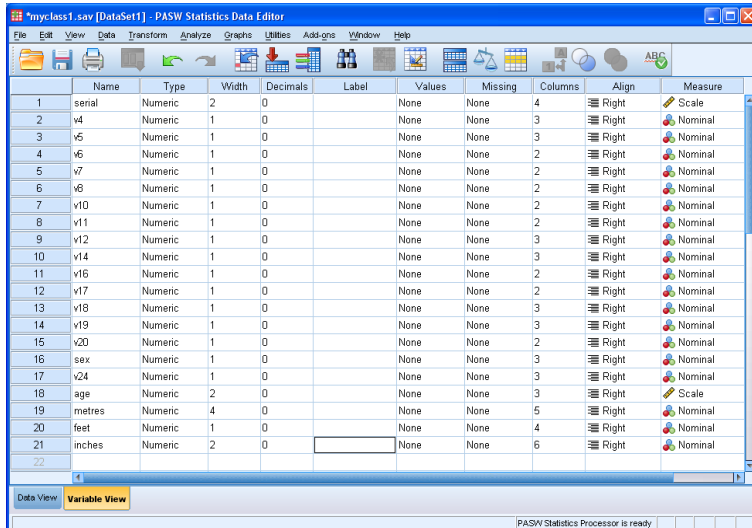
To go back to our original data from the pre-course questionnaire, let's start by labelling the **variables**.

You can do it the hard way via the drop-down menus with point-and-click, but it's a lot easier, quicker and clearer to do it in syntax, so navigate to folder **myclass** containing your work from previous sessions (I'm now working from my desktop, but the same applies to reading from floppy **a:** or CD **e:** It's better to work from your desktop or drive **a:** as SPSS cannot save files directly to drive **e:**)

Open your folder **myclass**



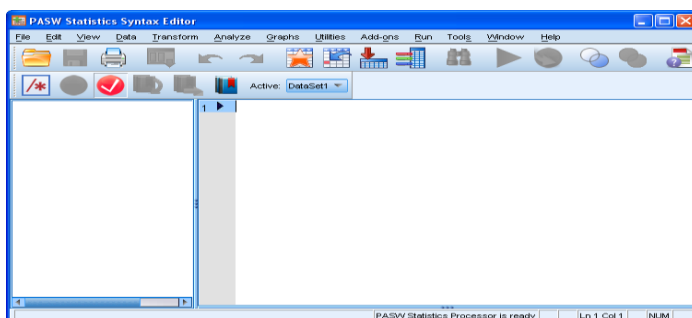
and double click on the SPSS saved file **myclass1.sav** (the one with the red check design)



SPSS automatically generates the following syntax and displays it in the **Viewer Window**.

```
GET  
  FILE='C:\Documents and Settings\Owner\Desktop\myclass\myclass1.sav'.  
DATASET NAME DataSet1 WINDOW=FRONT.
```

Click on **File** > **New** > **Syntax** to open a new syntax editor



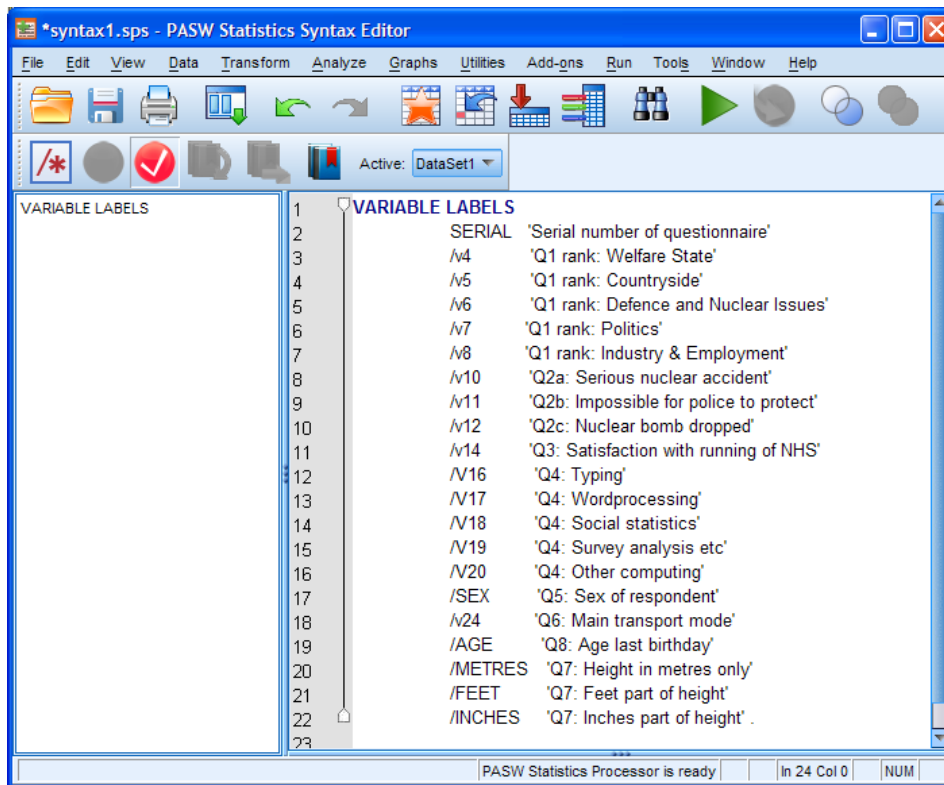
Copy the first few lines below, and then try writing the rest yourself without looking at the next page

variable labels

```
serial 'Serial number of questionnaire'  
/v4   'Q1 rank: Welfare State'  
/v5   'Q1 rank: Countryside'  
/v6   'Q1 rank: Defence and Nuclear Issues'  
~ ~ ~ .
```

When you have finished, don't forget the full stop at the end of the last line !

The end result should look something like this:

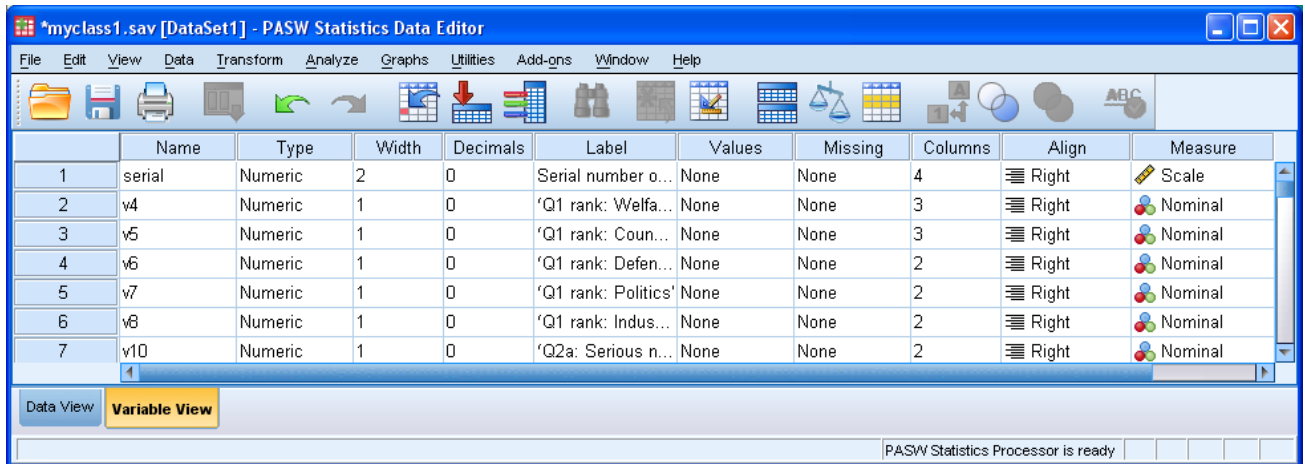


Whilst you are typing, SPSS will display part or all of the text in **red**. When you have finished typing, if you have made a mistake, some of it will still be in **red**. Common errors are missing a prime off the beginning or end of a label, missing a forward slash or the final full stop. Any spelling mistakes inside the labels will still be there since SPSS can't spell! If you mis-type a variable name, you won't find out until you run the job and get an error message.

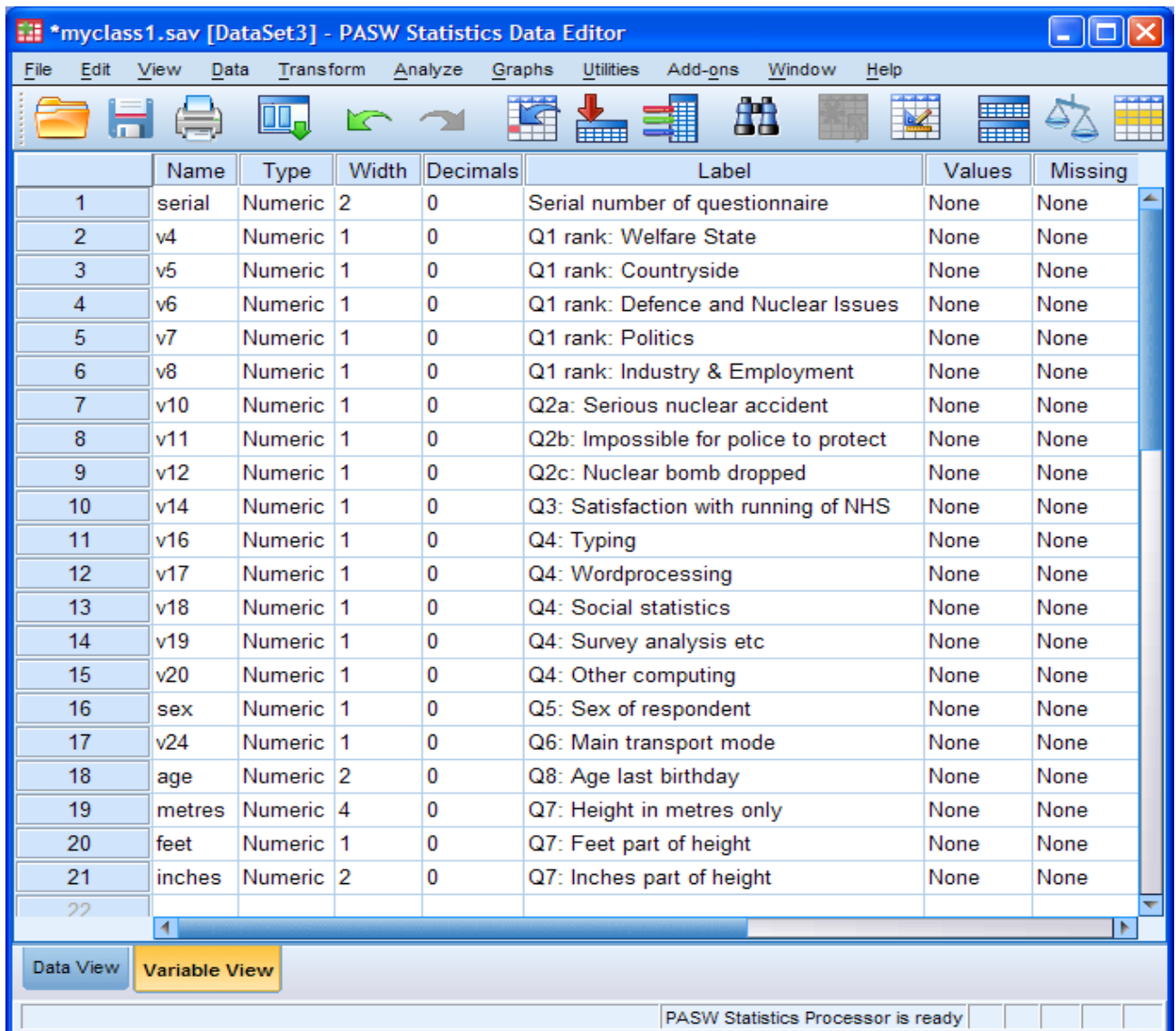
Click on ► to run the job and the output file displays the text you've just typed in:

```
VARIABLE LABELS
  SERIAL 'Serial number of questionnaire'
  /v4    'Q1 rank: Welfare State'
  /v5    'Q1 rank: Countryside'
  /v6    'Q1 rank: Defence and Nuclear Issues'
  /v7    'Q1 rank: Politics'
  /v8    'Q1 rank: Industry & Employment'
  /v10   'Q2a: Serious nuclear accident'
  /v11   'Q2b: Impossible for police to protect'
  /v12   'Q2c: Nuclear bomb dropped'
  /v14   'Q3: Satisfaction with running of NHS'
  /V16   'Q4: Typing'
  /V17   'Q4: Wordprocessing'
  /V18   'Q4: Social statistics'
  /V19   'Q4: Survey analysis etc'
  /V20   'Q4: Other computing'
  /SEX   'Q5: Sex of respondent'
  /v24   'Q6: Main transport mode'
  /AGE   'Q8: Age last birthday'
  /METRES 'Q7: Height in metres only'
  /FEET  'Q7: Feet part of height'
  /INCHES 'Q7: Inches part of height' .
```

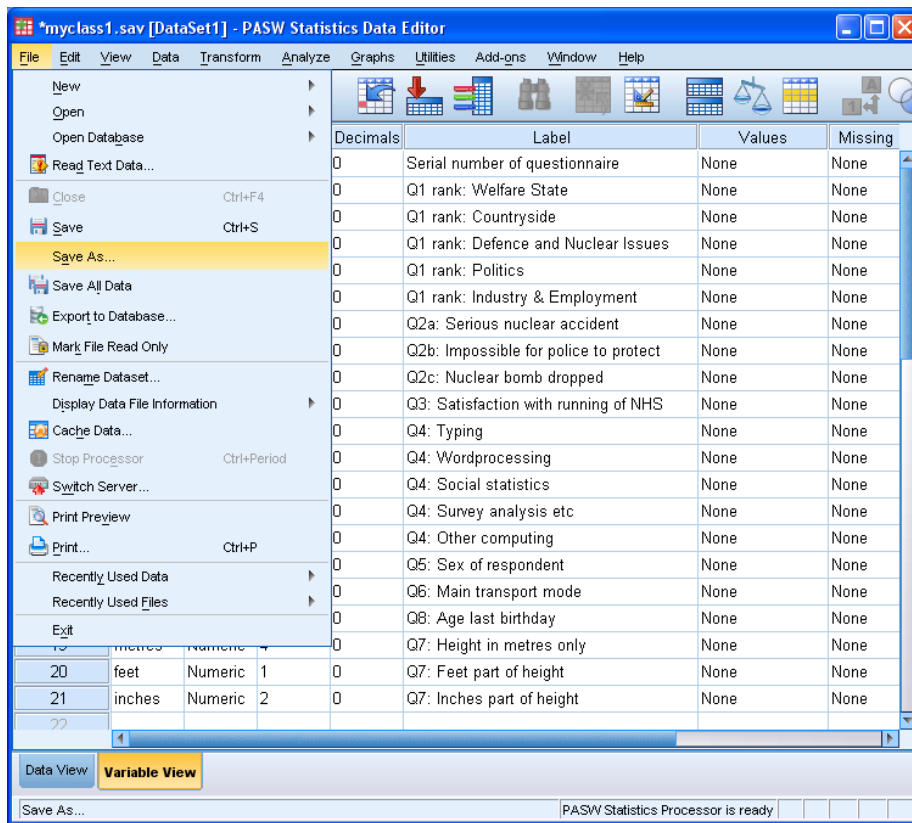
If you go back to the Data Editor, you will see that the **Label** column has now filled up with your variable labels, but you can't see them all properly.



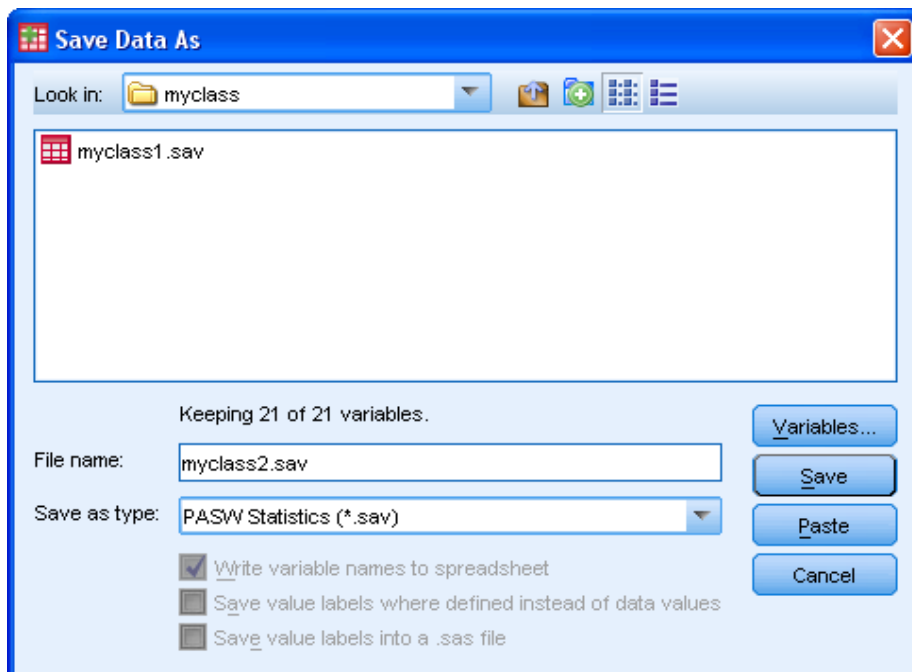
Hold the left mouse button down over the column separators and adjust the column widths to make things clearer and display only the information you need for now.



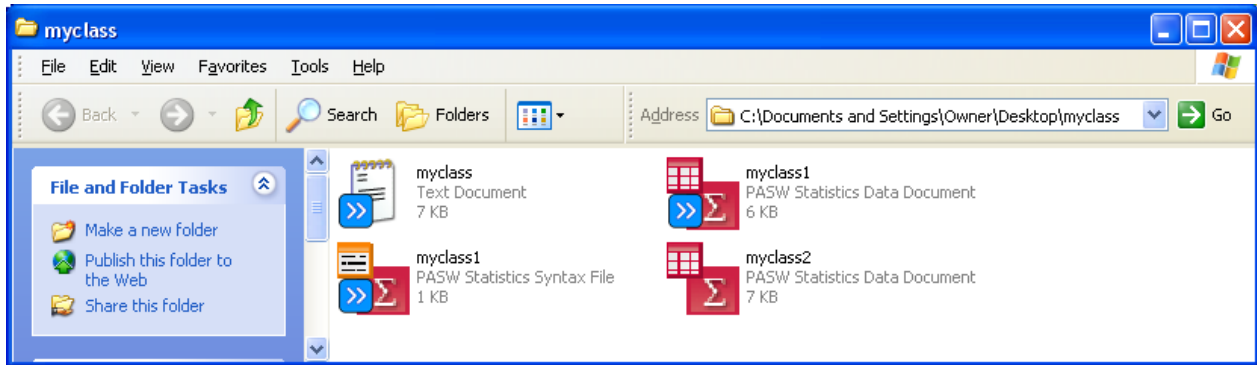
At this point **save the Data Editor** by clicking **File > Save As ...**



There's already a file **myclass1.sav** in the folder, so write **myclass2** in the **File name** box

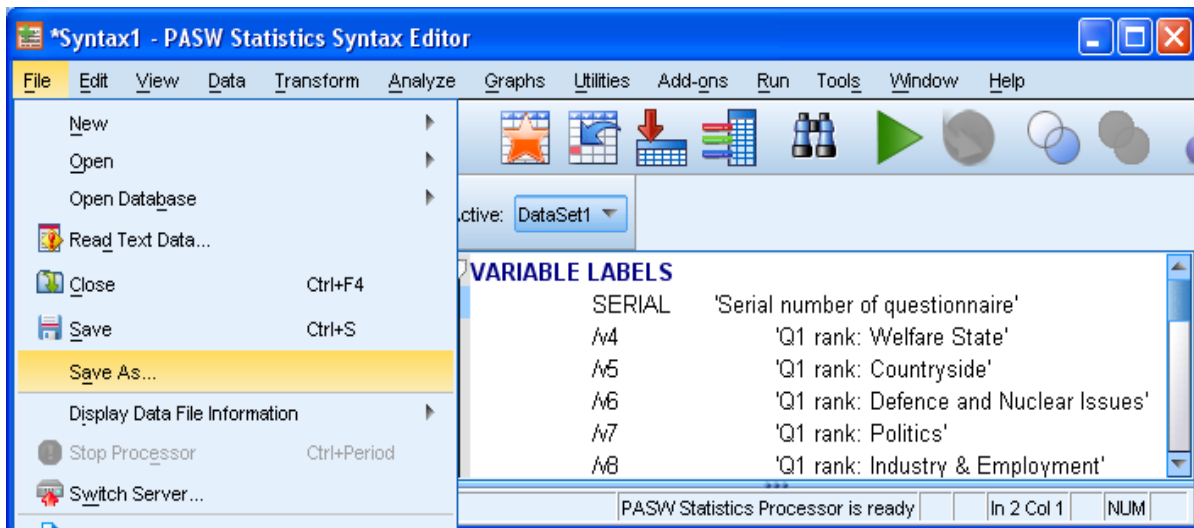


Click **Save** and the new edition will be saved in your **myclass** folder. As well as **myclass1.sav**, there will now also be **myclass2.sav**. At the same time the name in the top left of your Data Editor will change from ***myclass1.sav** to ***myclass2.sav**

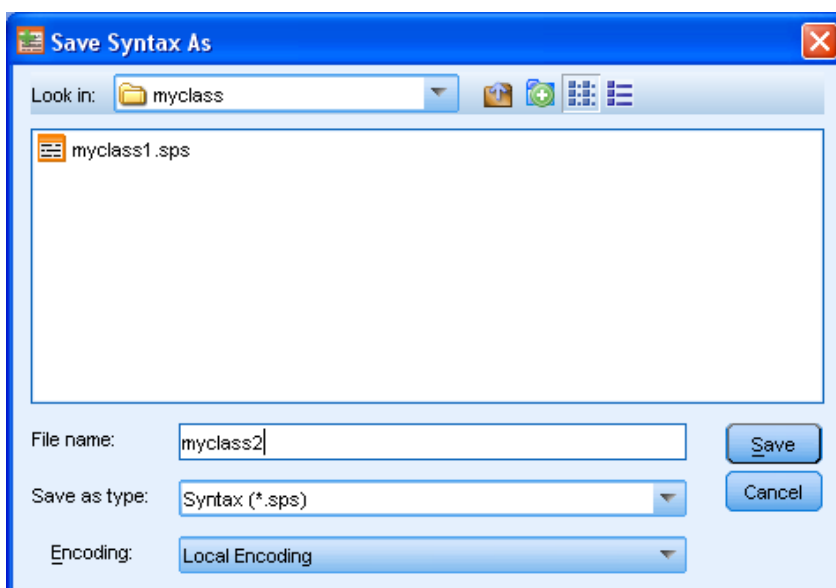


You should also save the syntax file as **myclass2.sps** in folder **myclass**. Then, if you make a mistake in the next step, or there's a computer crash, you won't have to go all the way back and start over!

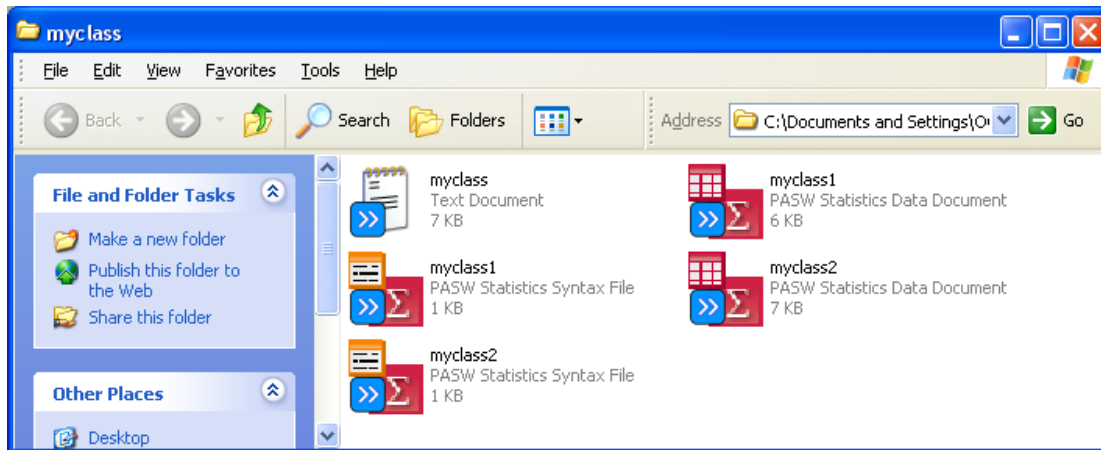
File > Save As ...



Write **myclass2** in the **Save as type** box



and click **Save**

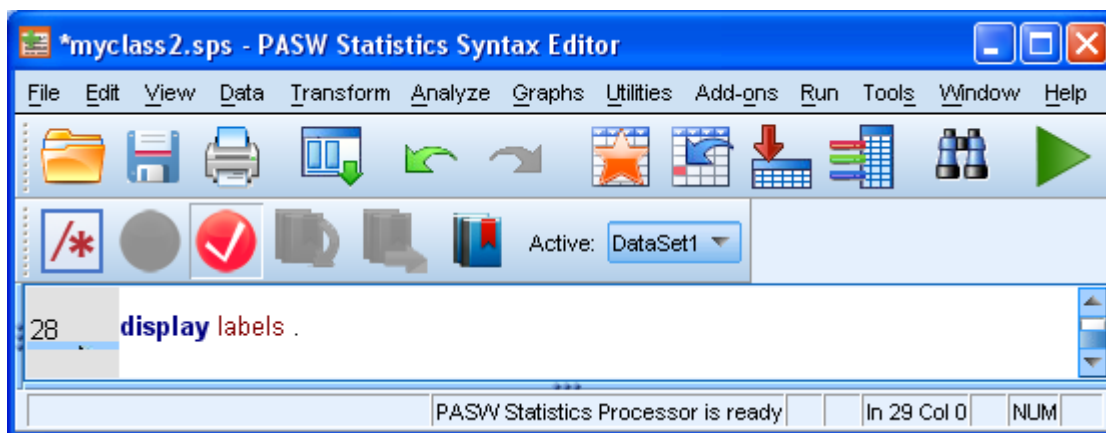


The name in the top left of your syntax window will change from `*Syntax1.sps` to `*myclass2.sps`

It's always advisable to have to hand hard copies of documentation such as the questionnaire, summary details of file contents and (if there is one) a copy of the user manual. As a check on the contents of the file we have already used the SPSS command **display** (not available in drop-down menus) to obtain a list of the variables in the file. We can now use it to list the variable names together with the labels we have just added.

Go back to the syntax file and add a new line at the end:

display labels .



and click on ► to produce the following squashed up table:

Table as originally output:

Variable Labels		
Variable	Position	Label
serial	1	Serial number of questionnaire
v4	2	Q1 rank: Welfare State
v5	3	Q1 rank: Countryside
v6	4	Q1 rank: Defence and Nuclear Issues
v7	5	Q1 rank: Politics
v8	6	Q1 rank: Industry & Employment
v10	7	Q2a: Serious nuclear accident
v11	8	Q2b: Impossible for police to protect
v12	9	Q2c: Nuclear bomb dropped
v14	10	Q3: Satisfaction with running of NHS
v16	11	Q4: Typing
v17	12	Q4: Word-processing
v18	13	Q4: Social statistics
v19	14	Q4: Survey analysis etc
v20	15	Q4: Other computing
sex	16	Q5: Sex of respondent
v24	17	Q6: Main transport mode
age	18	Q8: Age last birthday
metres	19	Q7: Height in metres only
feet	20	Q7: Feet part of height
inches	21	Q7: Inches part of height

Variables in the working file

This table now has to be edited manually.

Fortunately this can be done by dragging the right hand edge outwards until the variable labels occupy only a single line and you can print it up and keep as a reference guide.

Table after dragging right edge outwards:

Variable Labels		
Variable	Position	Label
serial	1	Serial number of questionnaire
v4	2	Q1 rank: Welfare State
v5	3	Q1 rank: Countryside
v6	4	Q1 rank: Defence and Nuclear Issues
v7	5	Q1 rank: Politics
v8	6	Q1 rank: Industry & Employment
v10	7	Q2a: Serious nuclear accident
v11	8	Q2b: Impossible for police to protect
v12	9	Q2c: Nuclear bomb dropped
v14	10	Q3: Satisfaction with running of NHS
v16	11	Q4: Typing
v17	12	Q4: Wordprocessing
v18	13	Q4: Social statistics
v19	14	Q4: Survey analysis etc
v20	15	Q4: Other computing
sex	16	Q5: Sex of respondent
v24	17	Q6: Main transport mode
age	18	Q8: Age last birthday
metres	19	Q7: Height in metres only
feet	20	Q7: Feet part of height
inches	21	Q7: Inches part of height

Variables in the working file

That's enough to do anybody's head in, so we'll stop there and do **value labels** in the next session.

Next session: 1.4.2 Labelling your values in SPSS

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