SPSS Tutorial # One

STARTING SPSS

Close all other Windows applications.

Go to the Windows Start icon on the Windows Desktop menu.

Click on Programs.

Click on SPSS for Windows.

Click on SPSS 10.1 for Windows.

The 'Open an existing data source' option should be marked. If it is not, mark it by clicking in the empty circle. An enlargement of this dialog box is shown next...
Click OK. If you click on Cancel, you may see the next screen...

...with this dialog box instructing you to insert a disk into Drive A.

(If you see the SPSS Data Editor screen, scroll down to p. 7 to see what to do next.)
Click on Cancel. This will bring up the next screen...

SPSS is looking for files with the *.sav extension. To find these files, we need to go to the C drive, that is Local Disk (C:) as shown in the next two pictures...

By clicking on Desktop, you will bring up all of the available drives...
Then click on Local Disk (C:)... This will bring up all the available files on the C drive...
Click on Program Files as shown...

Find the SPSS folder by using the scroll bar at the bottom of the dialog box and double click to open...
This will open the SPSS folder and reveal other folders, but more importantly, data files with the *.sav extensions. These are shown by…

…this symbol.

Click on the Cars data file as shown... and this will bring up a data file that we will use for this tutorial. If you get to this data file at this point, please proceed to a similar picture as the one shown to the left and follow those instructions...

OR SCROLL DOWN TO THE BEGINNING OF p. 9
This is the SPSS Data Editor screen... On closer inspection, it looks like the next screen.

This shows an enlargement of the SPSS Data Editor menu.

Click on File > then Open > then Data as shown to the left...
This is the same SPSS for Windows dialog box we saw before... Click OK.

You will open the SPSS folder and reveal SPSS DATA files that look like…

…this
Click on the Cars data file...

Or highlight the Cars data file and click Open...
EXAMINING DATA USING THE Data View This will open the Cars data file into the SPSS Data Editor window...

Upon closer inspection, we see the variable names across the top of each column. In the first column we see mpg or miles per gallon, in the second column we see engine, third...horse, fourth...weight, etc...

At the bottom left corner of the SPSS Data Editor screen we see we are looking at the Data View... Click on the Variable View and you will see the next screen....
The Variable View presents the variables in rows while the columns are characteristics of the variables. &nbsp;The Variable View is useful when you want to enter your own data for analysis...you will define your variables (what the variable is measuring) and value labels (what values are associated with the measure). A close-up view of the Variable View is shown below...

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Width</th>
<th>Decimals</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>mpg</td>
<td>Numeric</td>
<td>4</td>
<td>0</td>
<td>Miles per Gallon</td>
</tr>
<tr>
<td>engine</td>
<td>Numeric</td>
<td>6</td>
<td>0</td>
<td>Engine Displacement</td>
</tr>
<tr>
<td>Horsepower</td>
<td>Numeric</td>
<td>6</td>
<td>0</td>
<td>Horsepower</td>
</tr>
<tr>
<td>weight</td>
<td>Numeric</td>
<td>4</td>
<td>0</td>
<td>Vehicle Weight</td>
</tr>
<tr>
<td>year</td>
<td>Numeric</td>
<td>4</td>
<td>0</td>
<td>Model Year (in)</td>
</tr>
<tr>
<td>Origin</td>
<td>Numeric</td>
<td>1</td>
<td>0</td>
<td>Country of Origin</td>
</tr>
<tr>
<td>Cylinders</td>
<td>Numeric</td>
<td>1</td>
<td>0</td>
<td>Number of Cylinders</td>
</tr>
<tr>
<td>8</td>
<td>Numeric</td>
<td>1</td>
<td>0</td>
<td>cyl=1 cyl, Not Selectable</td>
</tr>
</tbody>
</table>

The first row details the characteristics of the mpg variable. Moving from left to right, columns contain information that defines the variable. The first column is, obviously, the Name of the variable. Type shows that the variable is coded as a numeric variable. Width shows that the variable is 4 bytes. Decimals shows the decimal places of your measure. Label is an expanded explanation of what your variable is measuring.
To view the entire Label for a variable you can expand the size of the column by moving the column separator at the top of the column, to the right of the Label...

Now you can see the entire label for each variable...

Try moving the active cell across any row. Buttons will appear in all but two cells, the Name and Label columns. Click on the button under the Type column, to the right of the Numeric cell and you will see this view...
This brings up a Variable Type dialog box where you can define the type of data, how many spaces you want to use to input your data, and how many decimal places you used to record your data... Please note, your Width may be different from the one shown. Click on Cancel to close this dialog box.

Under the Values column, click on the button next to

This will bring up the Value Labels dialog box where you can define values for your variables (like 1, 2, 3, etc.) and give each value a name (like American, European, etc.) An enlargement of this dialog box and other information is see in the next picture...
Click on Cancel to move to the next task.

Click on a cell under the Missing column. Click on the button to the right of None. This dialog box allows you to define missing values for each variable. There are no missing values for any variable in the Cars data set. However, you may have missing values in your own data set in the future. SPSS allows you to insert up to three different missing value codes. For example, 1 = "no show", while a 2 = "not applicable". This allows you to discriminate between different causes for missing data. Click on the Data View tab in the lower left corner.
Click on Analyze and then on Descriptive Statistics and then on Frequencies. This will bring up a dialog box called Frequencies as seen in the next figure.

Click on Country of Origin and move this variable to the empty box on the right by clicking on the &gt; button between the two boxes. This is shown in the next figure.
Click on OK.

By clicking on OK, you bring up a new window, called Output1 - SPSS Viewer. The SPSS Viewer screen will automatically appear as the active window on your computer monitor.
The SPSS Viewer window has two large display panes. On the left, the Viewer Outline pane shows the structure of the SPSS output. On the right, the pane shows information in the form of tables, charts, and text produced by SPSS statistical procedures.

To view output in the right pane, click on specific information you wish to see in the left pane. In this example, click on Notes in the left pane.
### Frequencies

#### Notes

<table>
<thead>
<tr>
<th>Output Created</th>
<th>11-OCT-2001 10:10:38</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments</td>
<td></td>
</tr>
<tr>
<td>Input</td>
<td>Data</td>
</tr>
<tr>
<td></td>
<td>Filter</td>
</tr>
<tr>
<td></td>
<td>Weight</td>
</tr>
<tr>
<td></td>
<td>SplitFile</td>
</tr>
<tr>
<td></td>
<td>N of Rows in Working Data File</td>
</tr>
<tr>
<td>Missing Value Handling</td>
<td>Definition of Missing</td>
</tr>
<tr>
<td>Cases Used</td>
<td></td>
</tr>
<tr>
<td>Syntax</td>
<td></td>
</tr>
<tr>
<td>Resources</td>
<td>Total Values Allowed</td>
</tr>
<tr>
<td></td>
<td>Elapsed Time</td>
</tr>
</tbody>
</table>

User-defined missing values are treated as missing.
Statistics are based on all cases with valid data.

FREQUENCIES
VARIABLES=origin
/ORIGIN= ANALYSIS.

This is an enlargement of the Notes box.
This is what your printout should look like.