INTRODUCTION TO SPSS
PART#2

ITEC107 – Introduction to Computing for Pharmacy

Outline

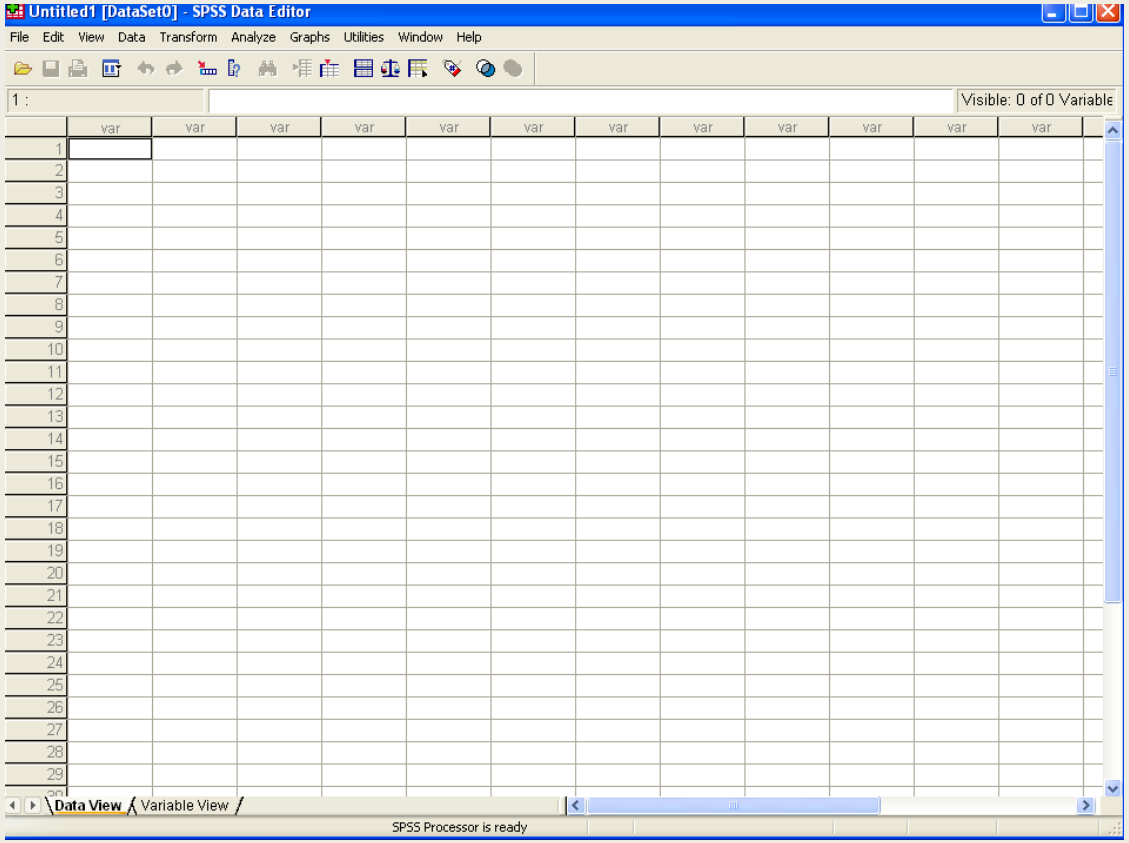
- Start SPSS
- Menu Interface
- Entering Data
- Output Viewer
- Getting Help
- Manually Entering Data
- Defining Variables
- Reading in Data from Excel to SPSS
- Defining Variables
- Saving Results(output)
- Export Output to Word File

Objectives

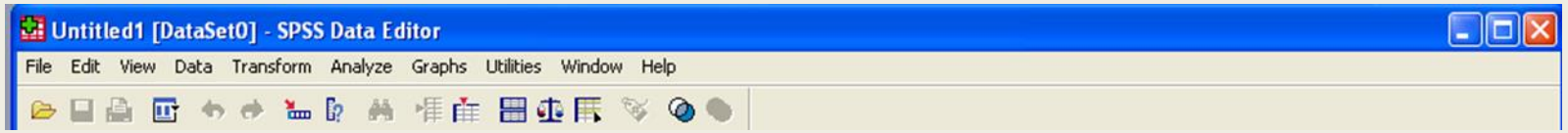
- To be able to create spss file
- To be able to understand variables
- To be able to define variables
- To be able to enter data
- To be able to import data from excel
- To be able to export output to word doc.

SPSS

- SPSS opens directly into an untitled Data Editor.



SPSS Menu &Toolbars



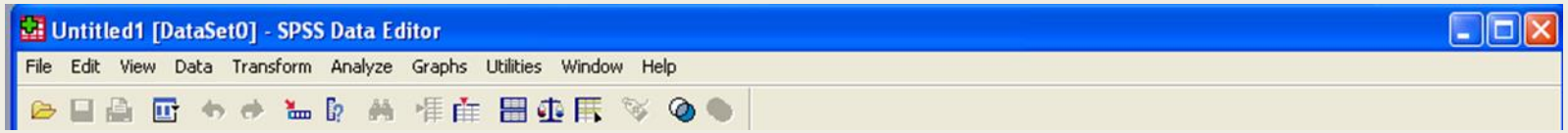
File, Edit, View, Window, Help: Similar to most windows applications.

- File - Standard options for opening, saving, printing and exiting
- Edit - Standard commands to undo, redo, cut, copy and paste
- View - Options for showing/hiding toolbars, displaying values or their labels in Data Editor
- Window - Provides option for switching between different SPSS windows
- Help – Contains SPSS help system

Getting Help

- Various ways to get help through the SPSS Help system.
- Select **Help|Topics**. Very useful giving information about how to carry out particular tasks.
- Select **Help|Case Studies**. Provides hands-on examples of how to create various types of statistical analyses and how to interpret the results.
- Select **Help|Statistics Coach**. Designed to assist in data analysis by leading you through a series of questions about your data and what you want to do with your data.

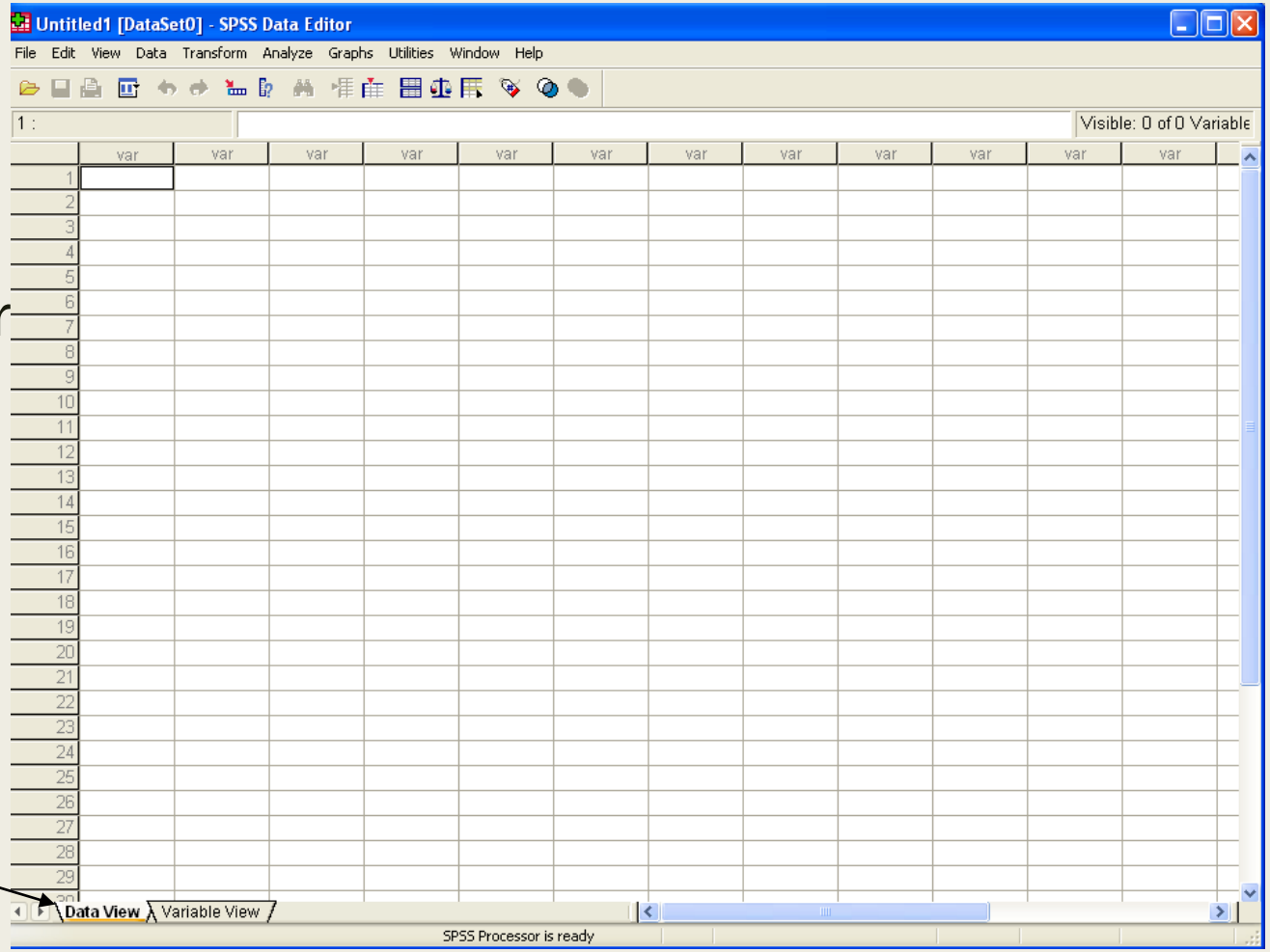
SPSS Menu &Toolbars(cont.)



- Data – Used to manipulate the data; sort, merge.. etc.
- Transform - Creation of new variables.
- Analyze - Heart of SPSS. This menu provides access to the statistical procedures for analysing your data set. All the items on the analyze menu have sub menus.
- Graphs - Provide options to create high quality plots and charts.
- Utilities - Used to display information on individual variables.

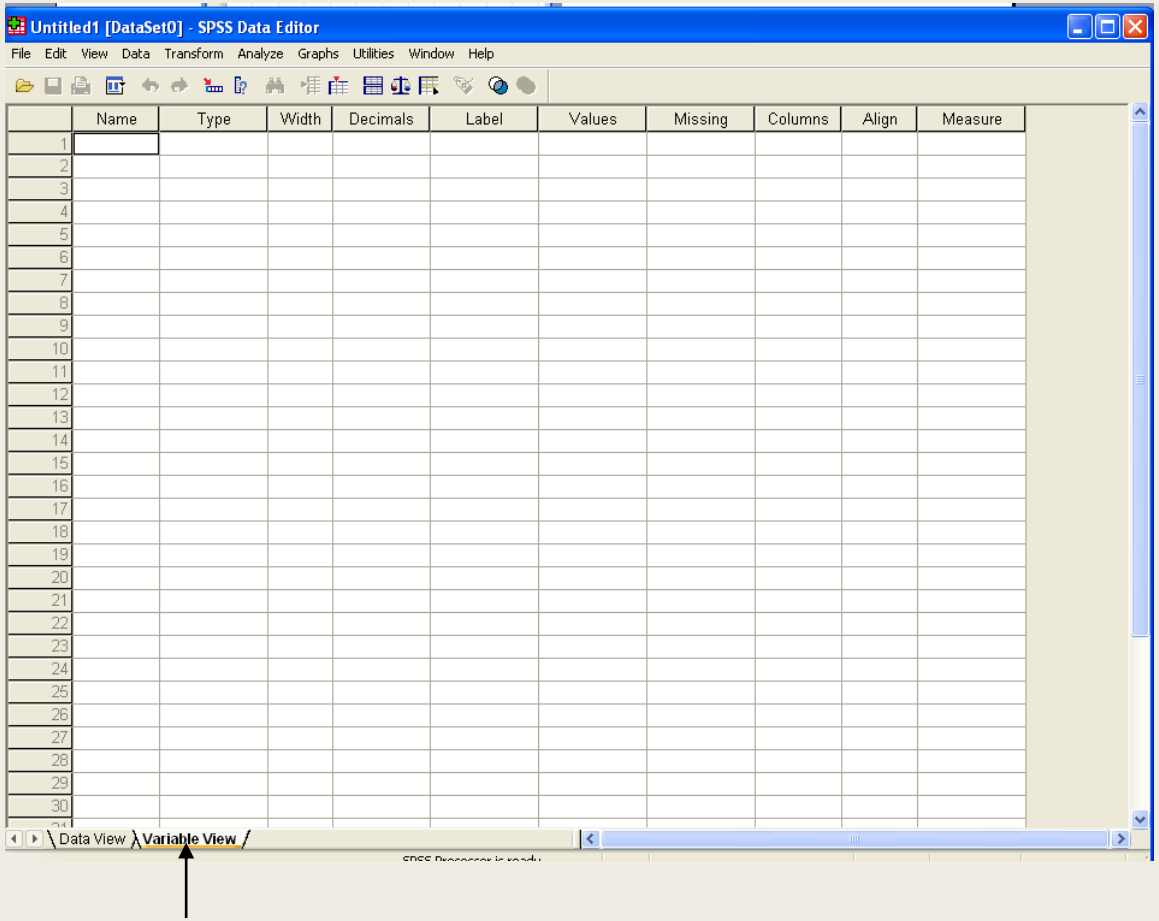
Data View

- Two different views within the data editor in SPSS
- Data View – Used for entering, editing and modifying data.
- Very much like an excel spreadsheet.



Variable View

- Used to define the type of information that is entered in to each column in data view.



Entering Data

- File | Open an existing SPSS data document (.sav)

  Or

- Manually Enter Data:

  1. Define Variables in Variable View
  2. Enter data in Data view

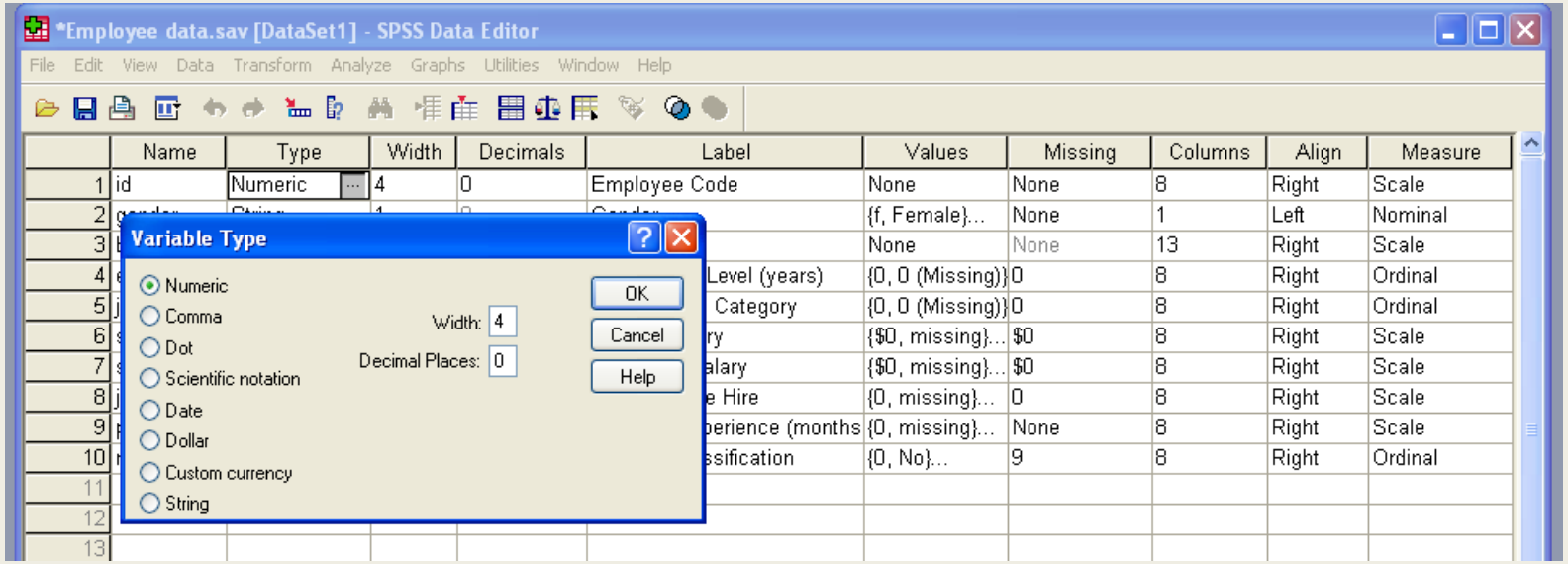
  Or

- Read Data in from Excel

Manually Entering Data – Defining Variables

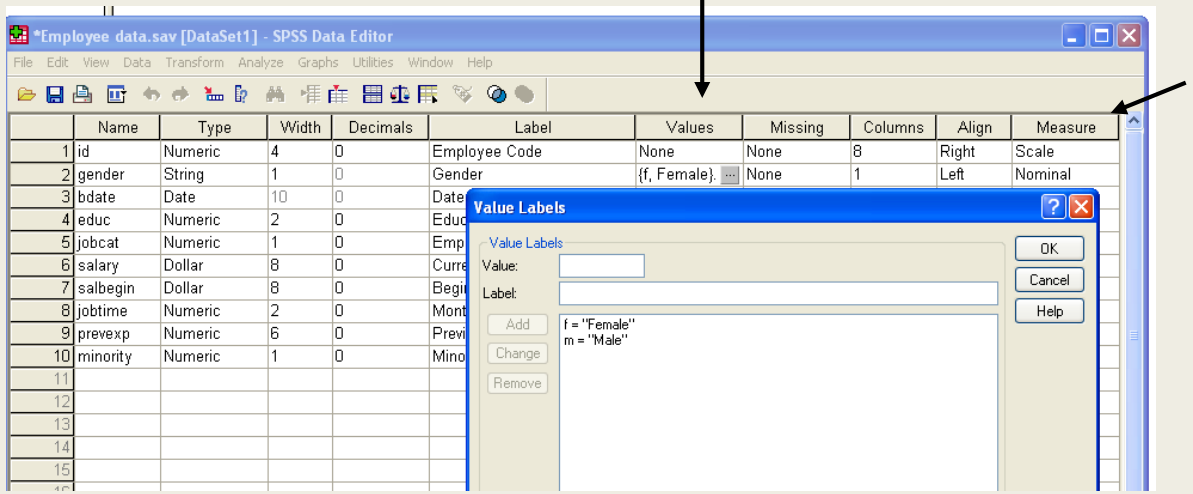
- In Variable View first name your variable in the Name column

- In the Type column click on the button ··· to reveal the Variable type dialogue box and select the appropriate variable type.



Manually Entering Data – Defining Variables

- In the Values column Click on the button ... to reveal the Values Labels dialogue box. Enter your values and corresponding labels for the variable you are defining if appropriate



- Define “Measure” (specific variable type e.g. nominal/ordinal/scale)
- Directly enter the data values in Data View

Reading in Data from Excel to SPSS

Two options:

- Copy data in excel and paste directly into the Data View screen
- Read in an excel file (.xls)

Reading in Data from Excel to SPSS

Warning:
SPSS is much better at handling numeric variables than string variables (categorical data entered as text).

Therefore, if you want to transfer data from Excel to SPSS it is a good idea to ensure that any categorical data (e.g. yes/no/don't know, male/female, etc.) are entered in Excel as numeric data (codes) rather than text.

For example, you could always code 'No' as 0 and 'Yes' as 1, and so on.

Reading in Data from Excel to SPSS

- Option 1: Copy and paste data from another spreadsheet directly into the Data Editor.

- Option 2:

1→ Start SPSS.

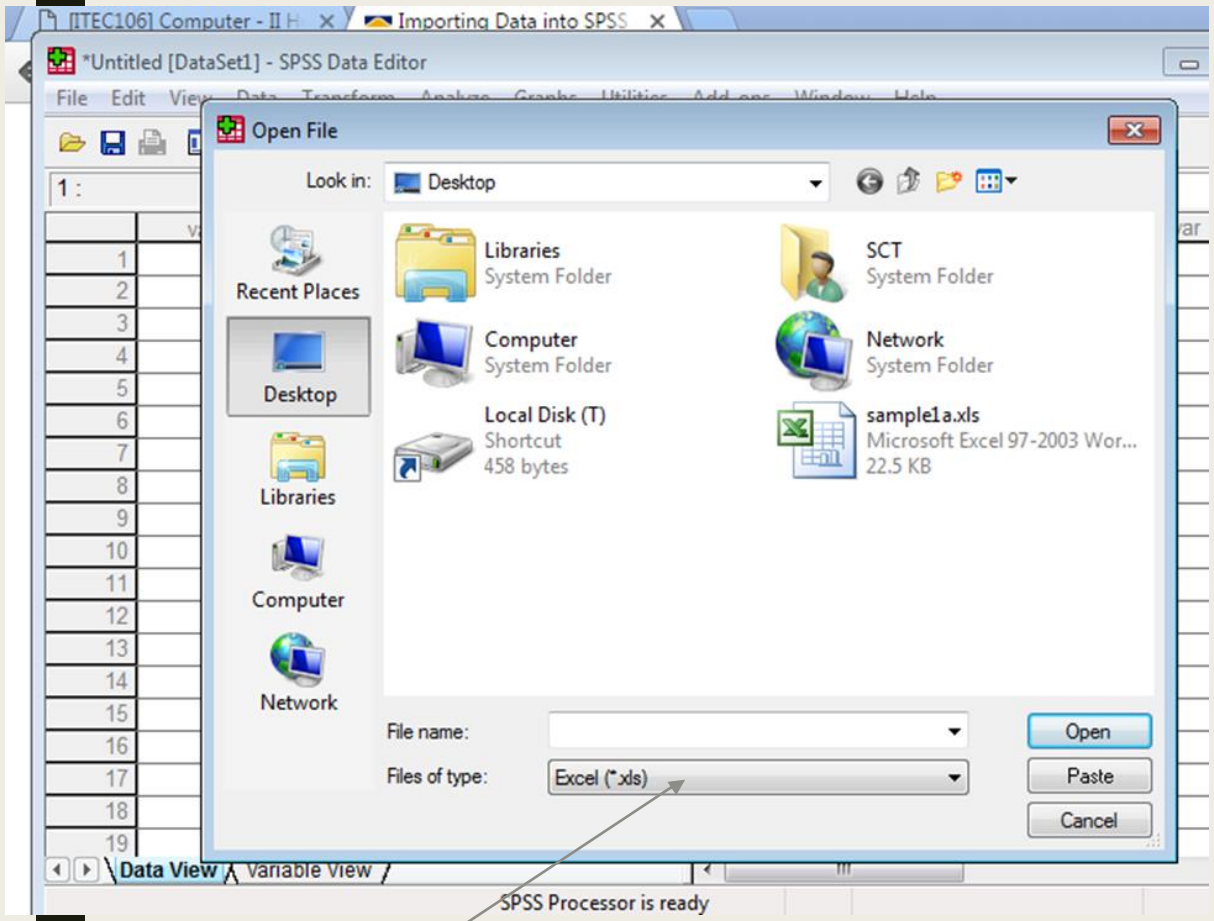
2 →Select File ⟶ Open ⟶ Data

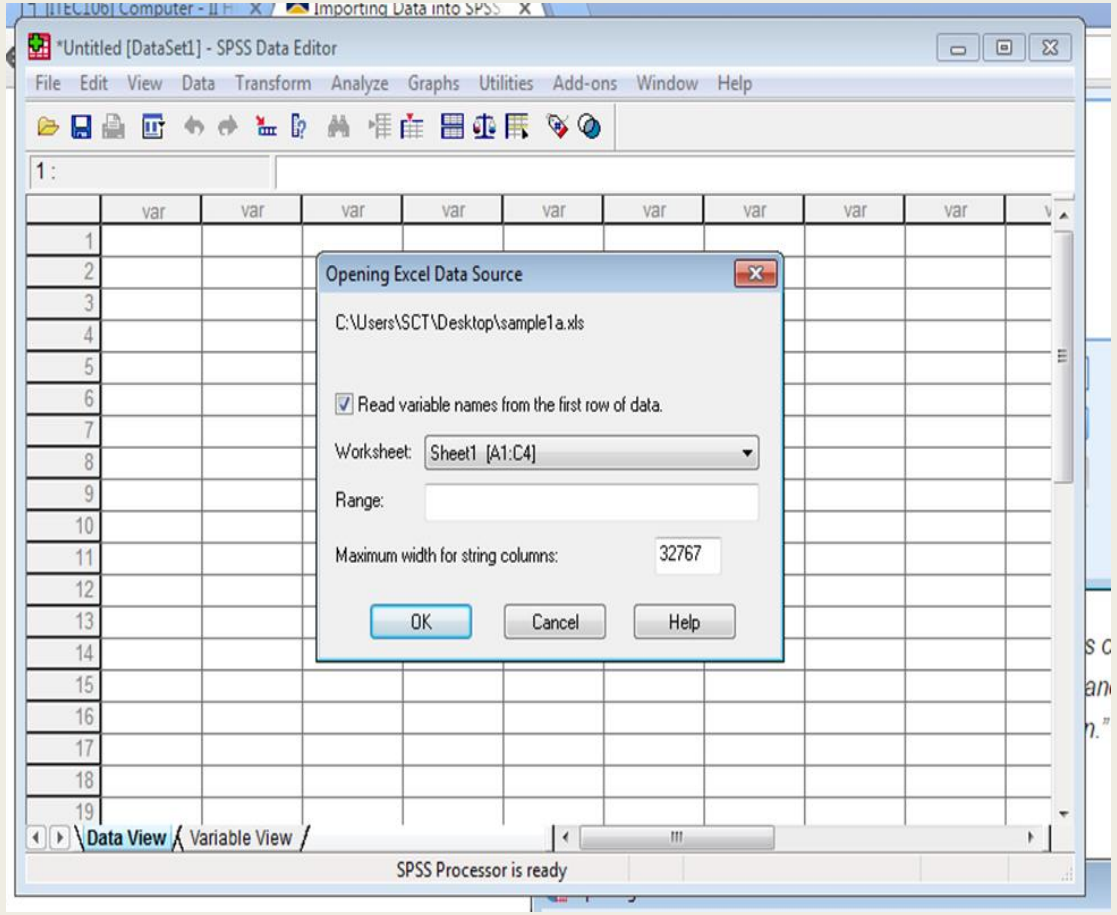
3 →Change the Files of type field to Excel (*.xls)

4 →Select your Excel file and click Open

5→ Check that the box labelled “Read variable names from the first row of data” is ticked and click OK (that is if the first row in excel contains your variable names, otherwise leave un-ticked)

6→ Your data should now appear in the SPSS data editor.


[ITEC106] Computer - II H
Importing Data into SPSS
*Untitled [DataSet1] - SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
Open File
Look in: Desktop
Recent Places
Desktop
Libraries
Computer
Network
Libraries
System Folder
Computer
System Folder
Local Disk (T)
Shortcut
458 bytes
SCT
System Folder
Network
System Folder
sample1a.xls
Microsoft Excel 97-2003 Wor...
22.5 KB
File name:
Files of type: Excel (*.xls)
Open
Paste
Cancel
Data View
Variable View
SPSS Processor is ready


*Untitled [DataSet1] - SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help
Opening Excel Data Source
C:\Users\SCT\Desktop\sample1a.xls
Read variable names from the first row of data.
Worksheet: Sheet1 [A1:C4]
Range:
Maximum width for string columns: 32767
OK
Cancel
Help
Data View
Variable View
SPSS Processor is ready

Entering Data

- Can also transfer in data from other databases
- Ideally use **Stat/Transfer** – commercially produced software package for transferring data between spreadsheet software packages including Excel, Lotus , Paradox, Dbase and Quattro Pro and statistical software packages.
- Import ASCII (text) files, **File | Read ASCII Data**

Rules for Defining Variable Names

- The name must begin with a letter.
- Maximum of 8 characters and no spaces.
- Names must be unique.
- @ # _ or $ allowed.
- A full stop can be used but not as the last character, so best avoided.
- The space character and others such as * ! ? And ‘ are not allowed.
- Names are not case sensitive so ID, id and Id are identical.

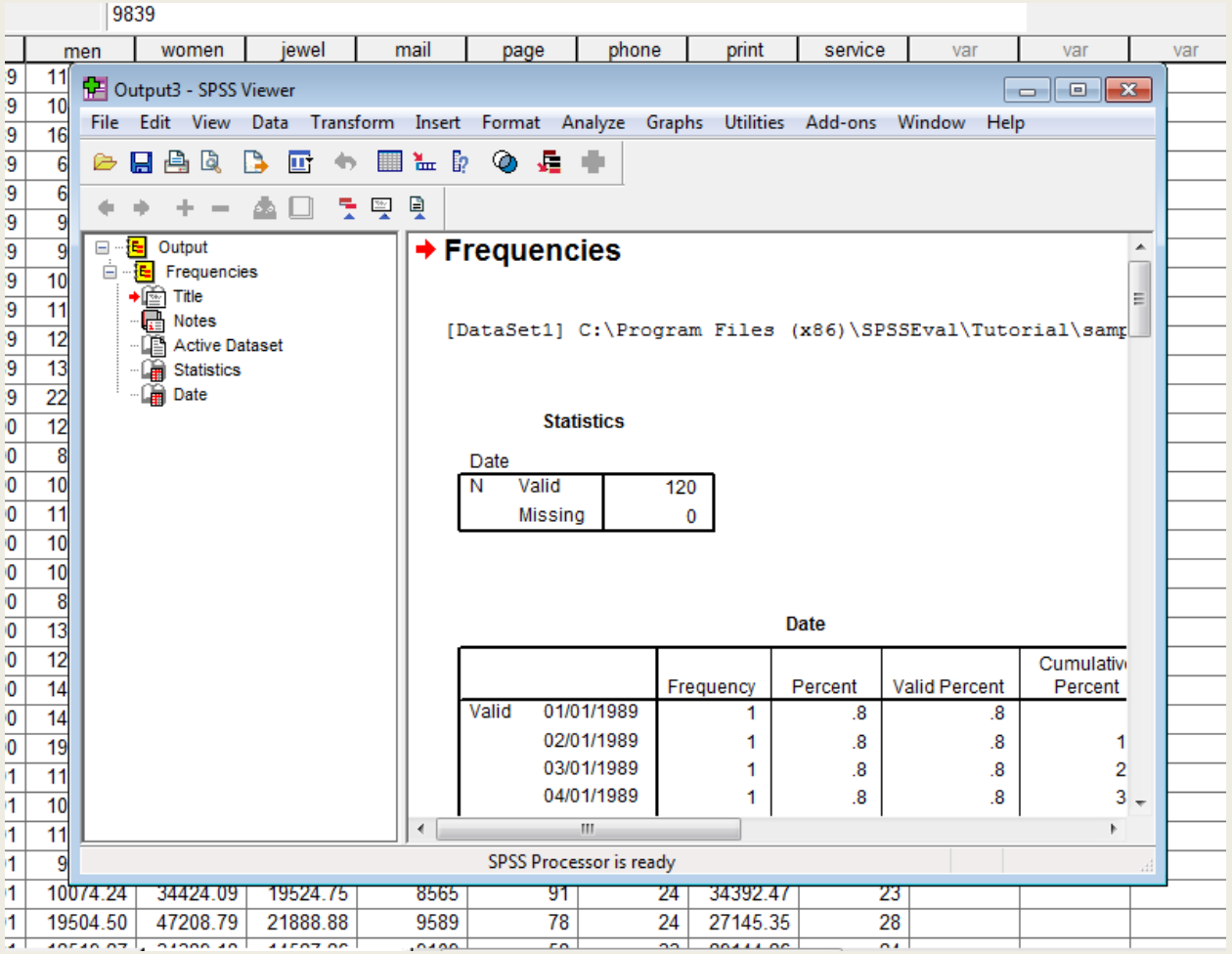
Rules for Defining Variables

- Certain SPSS keywords are no allowed as variable names they are:

ALL	TO	WITH	BY	AND
OR	NOT	EQ	NE	LE
LT	GE	GT		

Output Viewer

- Where results of statistical analysis performed via analyze are displayed (will open automatically when analysis is performed).



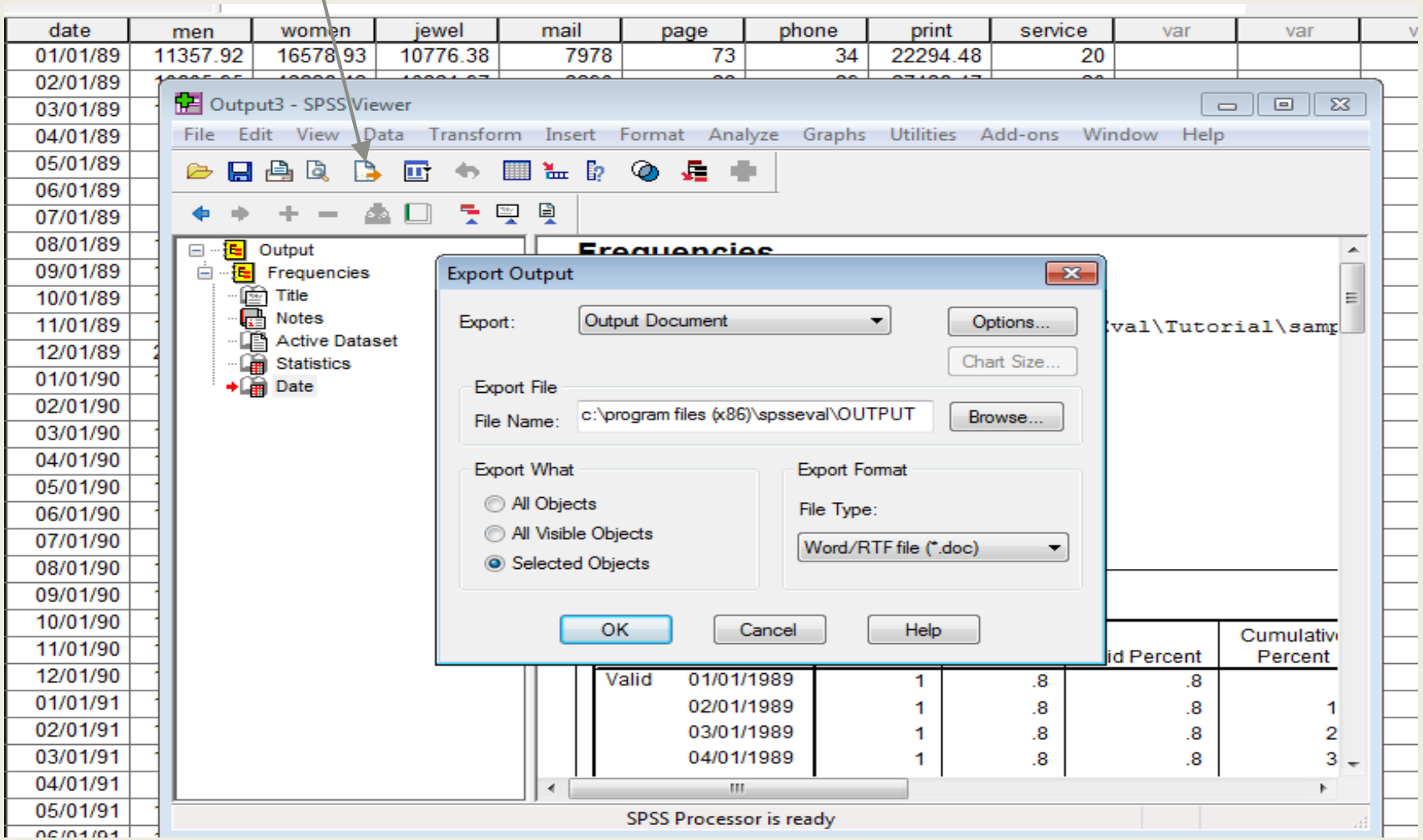
Saving the Data Worksheet

- Although you can click directly on the Save button in the Data Editor window a better approach is to select **File|Save As**

Saving Results(output)

- In the output viewer window the output can also be saved by choosing **File|Save As**

Export Output to Word File



Finishing with SPSS

- Bring the Data Editor window to the top and choose **File|Exit.**
- Remember to save your worksheet &/or results first if required.

What we have learned!

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