

Introduction to SPSS

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Lead Organizer, Health Research ToolBox: A Step by Step Guide for Beginners
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SECTION-I Introduction

Opening a Data File (Con..)

To open a data file:

From the menus choose:

File >Open >Data..

Opening a Data File (Con..)

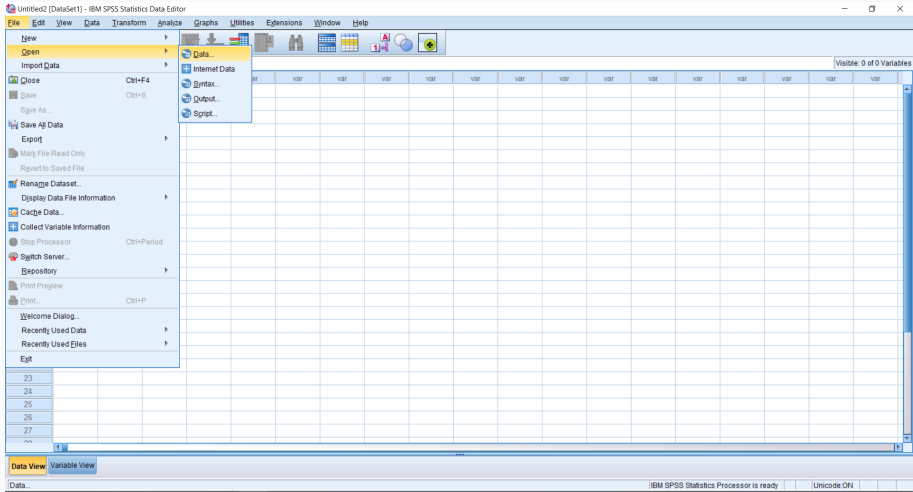


Figure 1: 1st step

Opening a Data File (Con..)

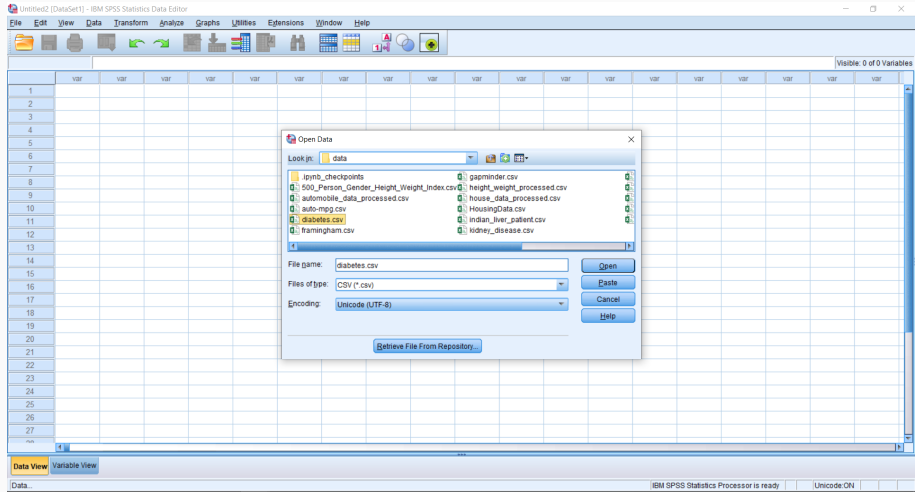


Figure 2: 2nd step

Opening a Data File

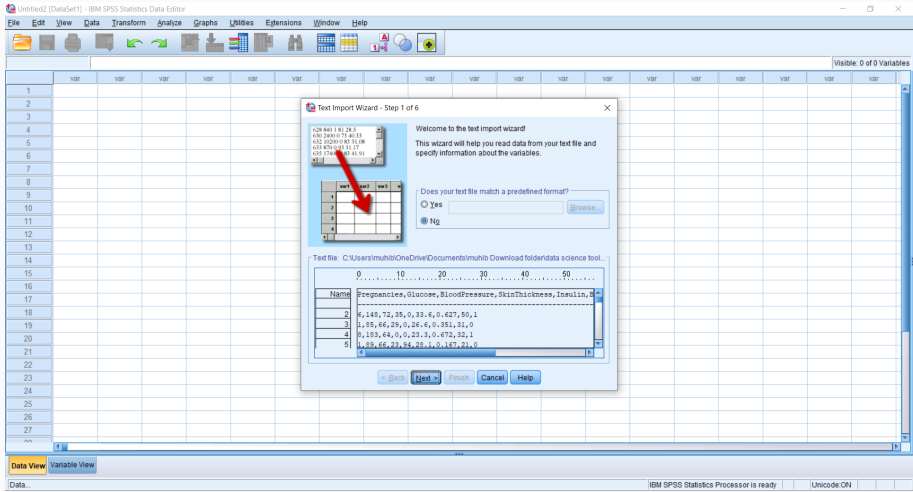


Figure 3: 3rd step

Running an Analysis (Con..)

To run an analysis:

From the menus choose:

Analyze > Descriptive Statistics > Frequencies...

Running an Analysis (Con..)

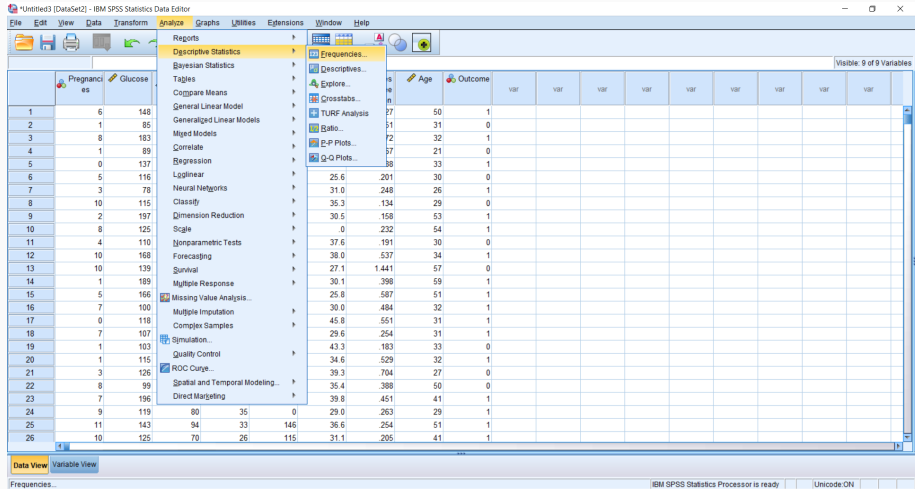


Figure 4: 1st step

Running an Analysis (Con..)

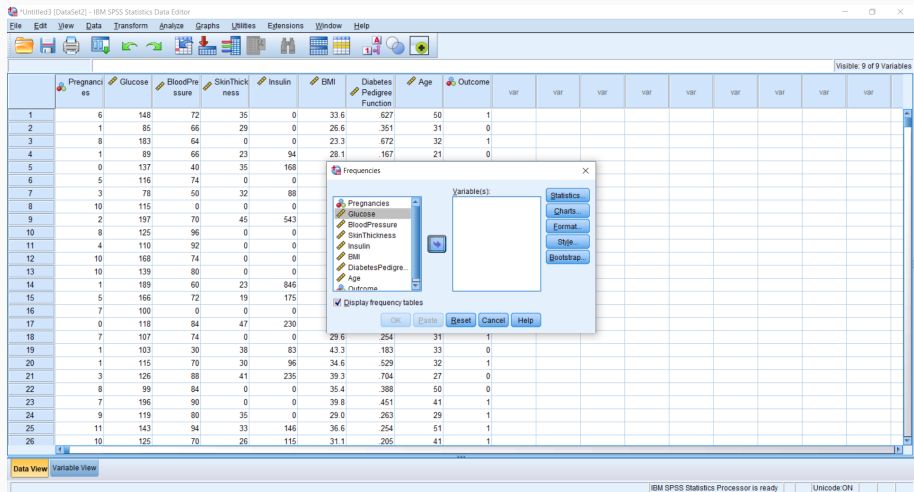


Figure 5: 2nd step

Running an Analysis

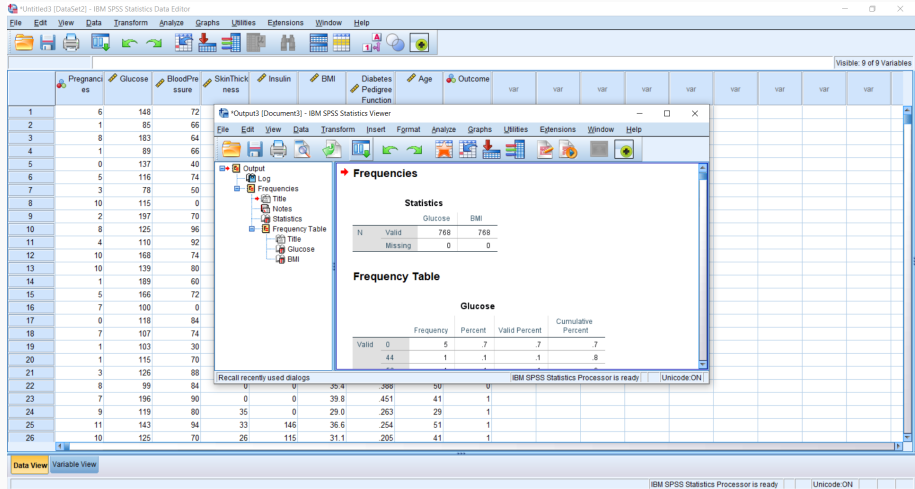













Figure 6: 3rd step

An icon next to each variable provides information about data type and level of measurement

	Numeric	String	Date	Time
Scale (Continuous)		n/a		
Ordinal				
Nominal				

Viewing Result

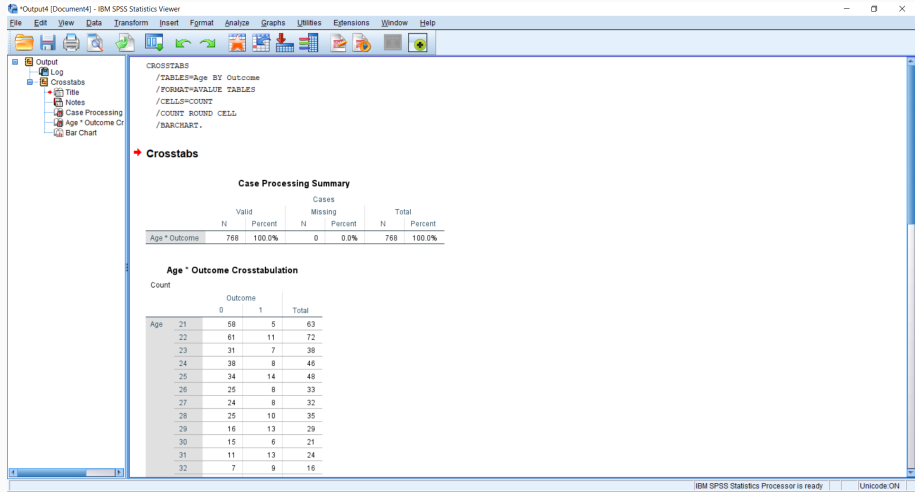


Figure 7: Result View

Creating Charts (Con..)

To create a chart:

From the menus choose:

- Graphs > Graph Template Chooser/ Legacy Dialogues...
- Click the Gallery tab (if it is not selected).
- Select Chart / variables (if it is not selected).
- Click OK to create the chart.

Created Chart

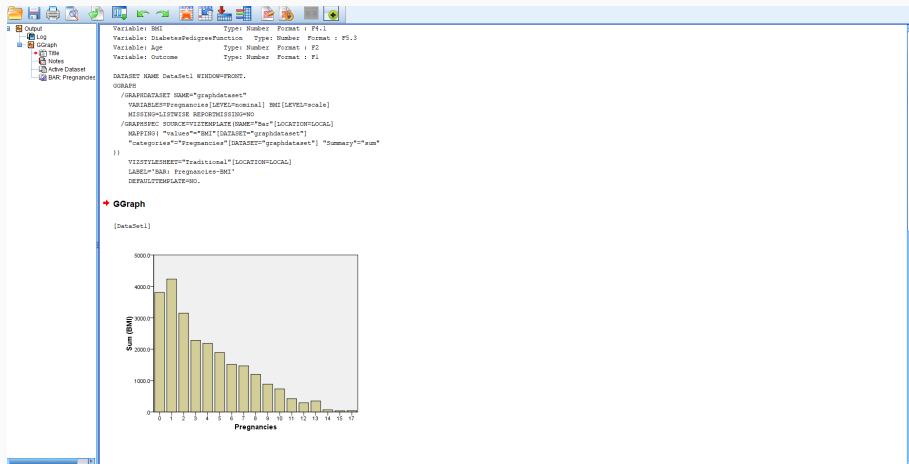
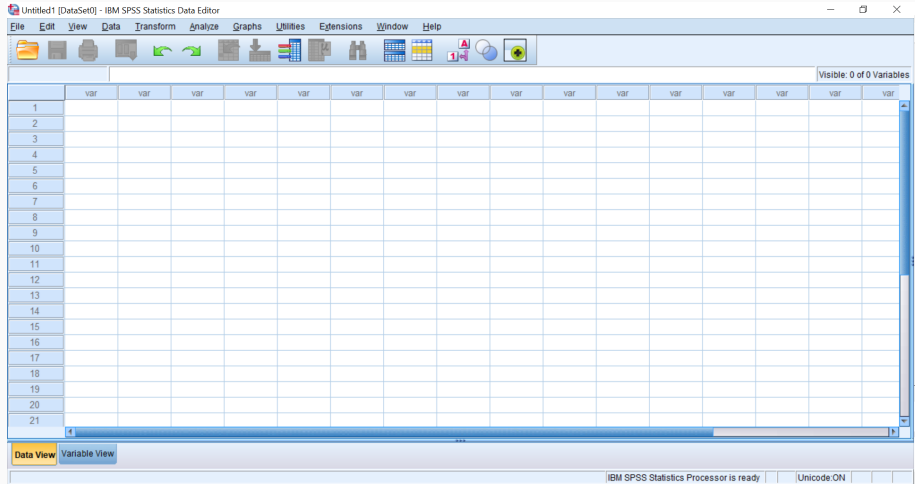


Figure 8: Created Graph

SECTION-II Reading Data

Basic Structure of IBM SPSS Statistics Data Files

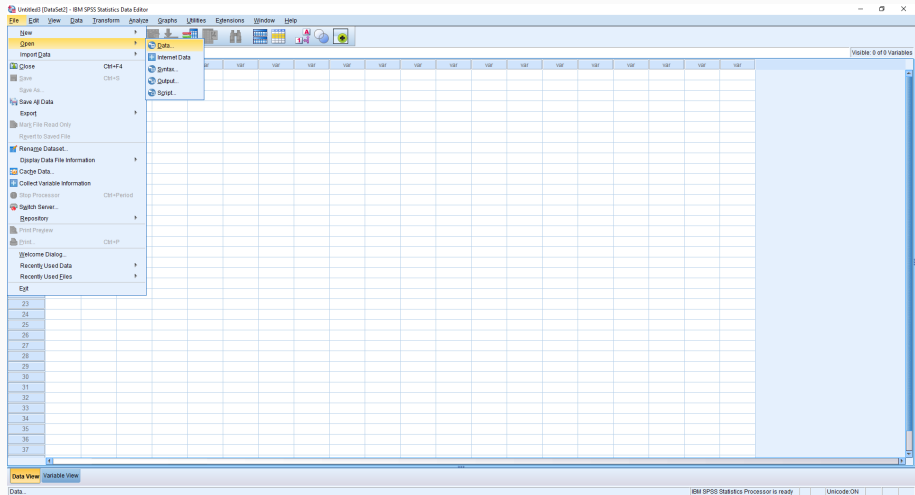


Reading IBM SPSS Statistics Data Files (Con..)

From the menus choose:

- File >Open >Data...
- Browse to and open demo.sav.

Reading IBM SPSS Statistics Data Files (Con..)



Reading IBM SPSS Statistics Data Files

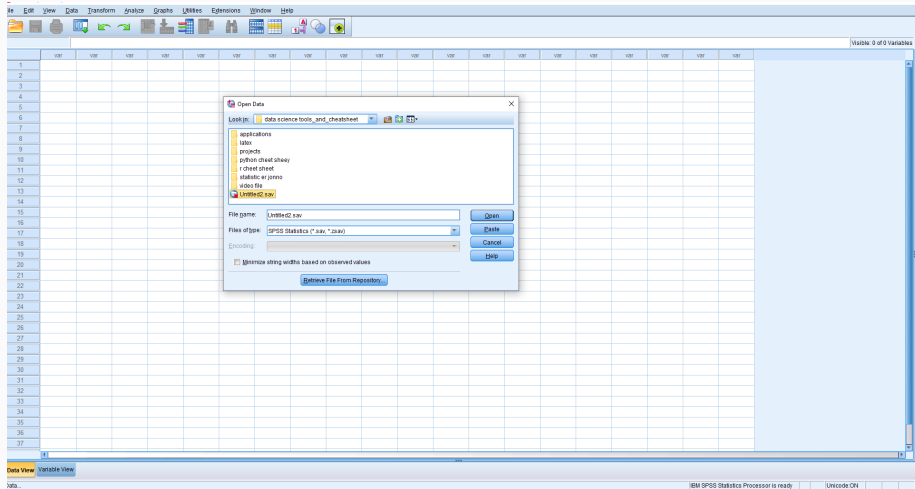


Figure 9: Select Data file from directory

Reading Data from Spreadsheets (Con..)

From the menus choose:

- File >Open >Data...
- Browse to and open demo.xls.
- Make sure that Read variable names from the first row of data is selected.
- Click OK to read the Excel file.

Reading Data from Spreadsheets (Con..)

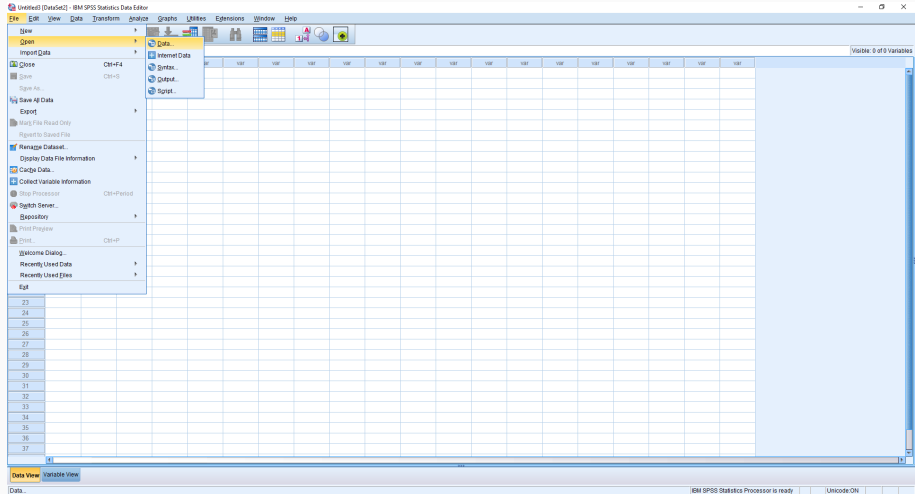


Figure 10: 1st step

Reading Data from Spreadsheets

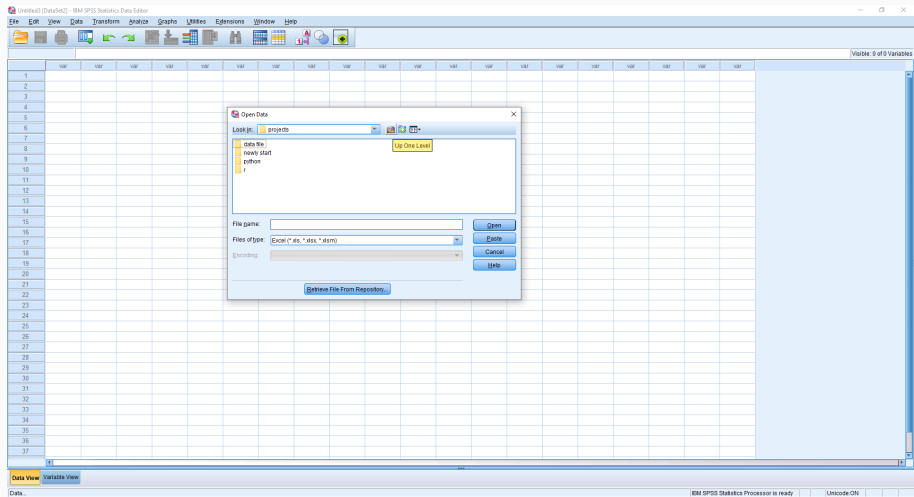


Figure 11: 1st step

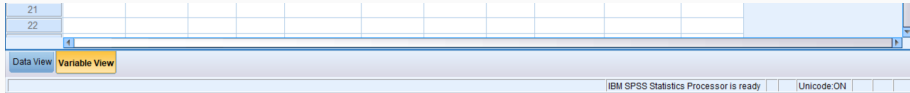
Reading Data from Others

Reading data from others source like - csv,database and text file is same as spreadsheets, SPSS files.

SECTION–III Create or Edit Dataset Using the Data Editor

Entering Numeric Data/ Creating Dataset (Con..)

- Click the Variable View tab at the bottom of the Data Editor window.



- In the first row of the first column, type age.
- In the second row, type marital.
- In the third row, type income.

Entering Numeric Data/ Creating Dataset (Con..)

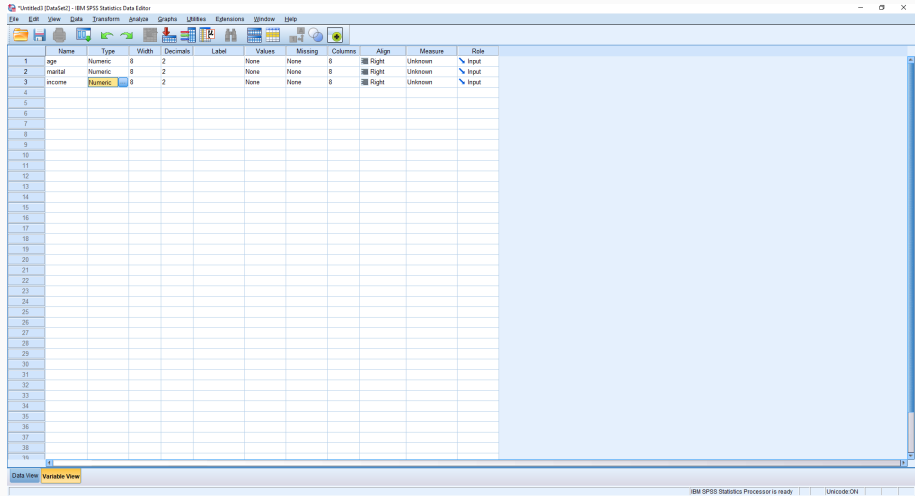
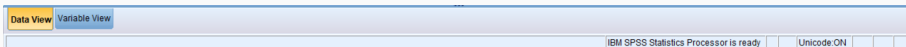


Figure 12: Select Numeric Data Type

Entering Numeric Data/ Creating Dataset (Con..)

- Click the Data View tab to continue entering the data.



- In the age column, type 55.
- In the marital column, type 1.
- In the income column, type 72000.

Entering Numeric Data/ Creating Dataset

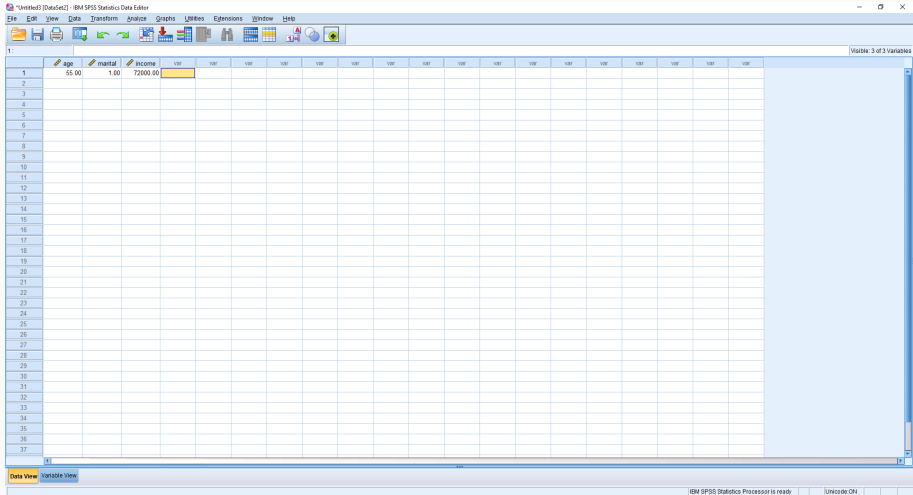
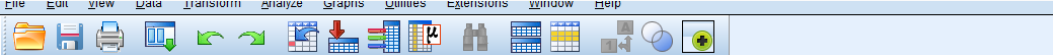


Figure 13: Numeric Data Entry

Entering String Data (Con..)

- Click the Variable View tab at the bottom of the Data Editor window.
- In the first cell of the first empty row, type name for the variable name.
- Click the Type cell next to your entry.
- Click the button on the right side of the Type cell to open the Variable Type dialog box.
- Select String to specify the variable type.
- Click OK to save your selection and return to the Data Editor.

Entering String Data (Con..)




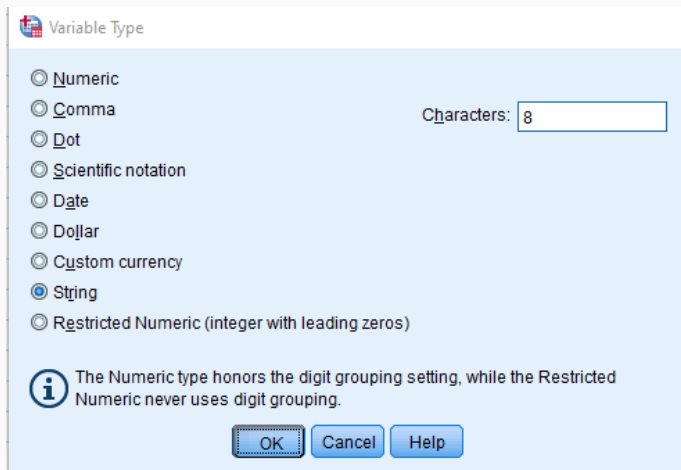
	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
1	age	Numeric	8	2		None	None	8	Right	Unknown	Input
2	marital	Numeric	8	2		None	None	8	Right	Unknown	Input
3	income	Numeric	8	2		None	None	8	Right	Unknown	Input
4	Name	Numeric 	8	0		None	None	8	Right	Nominal	Input
5											
6											
7											

Figure 14: Click on Three Dots

Entering String Data



The image shows a 'Variable Type' dialog box with a light blue background. At the top left is a small icon of a red cross on a blue background. The title 'Variable Type' is in a dark font. Below the title is a list of variable types, each preceded by a radio button. The 'String' option is selected, indicated by a blue dot. To the right of the list is a text field labeled 'Characters:' containing the number '8'. At the bottom of the dialog are three buttons: 'OK', 'Cancel', and 'Help'. An information icon (a lowercase 'i' in a circle) is located to the left of a paragraph of text at the bottom.

Variable Type

☐ Numeric

☐ Comma

☐ Dot

☐ Scientific notation

☐ Date


☐ Dollar

☐ Custom currency

☒ String

☐ Restricted Numeric (integer with leading zeros)

Characters: 8

 The Numeric type honors the digit grouping setting, while the Restricted Numeric never uses digit grouping.

OK Cancel Help

Figure 15: Select Variable Type

Adding Variable Labels (Con..)

- Click the Variable View tab at the bottom of the Data Editor window.
- In the Label column of the age row, type Respondent's Age.
- In the Label column of the marital row, type Marital Status.
- In the Label column of the income row, type Household Income.
- In the Label column of the name row, type Respondent's Name.

Adding Variable Labels

	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
1	age	Numeric	8	2	Respondent's Age	None	None	8	Right	Unknown	Input
2	marital	Numeric	8	2	Marital Status	None	None	8	Right	Unknown	Input
3	income	Numeric	8	2	Household Income	None	None	8	Right	Unknown	Input
4	Name	Numeric	8	0	Respondent's Name	None	None	8	Right	Nominal	Input
5											
6											
7											
8											
9											
10											
11											
12											
13											

Figure 16: Labeling Variable

Adding Value Labels for Numeric Variables and String Variables (Con..)

- Click the Variable View tab at the bottom of the Data Editor window. Create a new variable - sex and it's **Label** is **Gender** and **Type** is **String**.
- Click the Values cell in the sex row, and then click the button on the right side of the cell to open the **Value Labels** dialog box.
Type F in the Value field, and then type Female in the Label field.
Type M in the Value field, and then type Male in the Label Field.
- Or for marital row -
The **value label** is the string label that is applied to the specified numeric value.
Type 0 in the Value field.
Type Single in the Label field.

Adding Value Labels for Numeric Variables and String Variables (Con..)

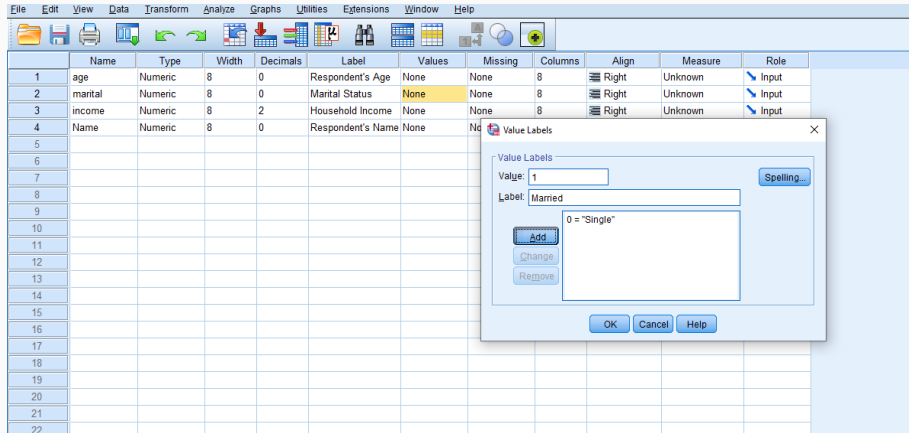


Figure 17: Numeric Variable

Adding Value Labels for Numeric Variables and String Variables

The screenshot displays the SPSS Variable View window. The main table lists variables with their properties. The 'sex' variable is highlighted, and the 'Value Labels' dialog box is open for it.

Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
age	Numeric	8	0	Respondent's Age	None	None	8	Right	Unknown	Input
marital	Numeric	8	0	Marital Status	{0, Single}...	None	8	Right	Unknown	Input
income	Numeric	8	2	Household Income	None	None	8	Right	Unknown	Input
Name	String	8	0	Respondent's Name	None	None	8	Left	Nominal	Input
sex	String	8	0	Gender	None	None	8	Left	Nominal	Input

The 'Value Labels' dialog box for the 'sex' variable shows the following configuration:

- Value:
- Label:
- Buttons: Add, Change, Remove, Spelling...
- List box content:
 - F = "Female"
 - M = "Male"
- Buttons: OK, Cancel, Help

Figure 18: String Variable

Thank You

