SPSS
Statistical Package for the Social Sciences

Introduction

Data entry

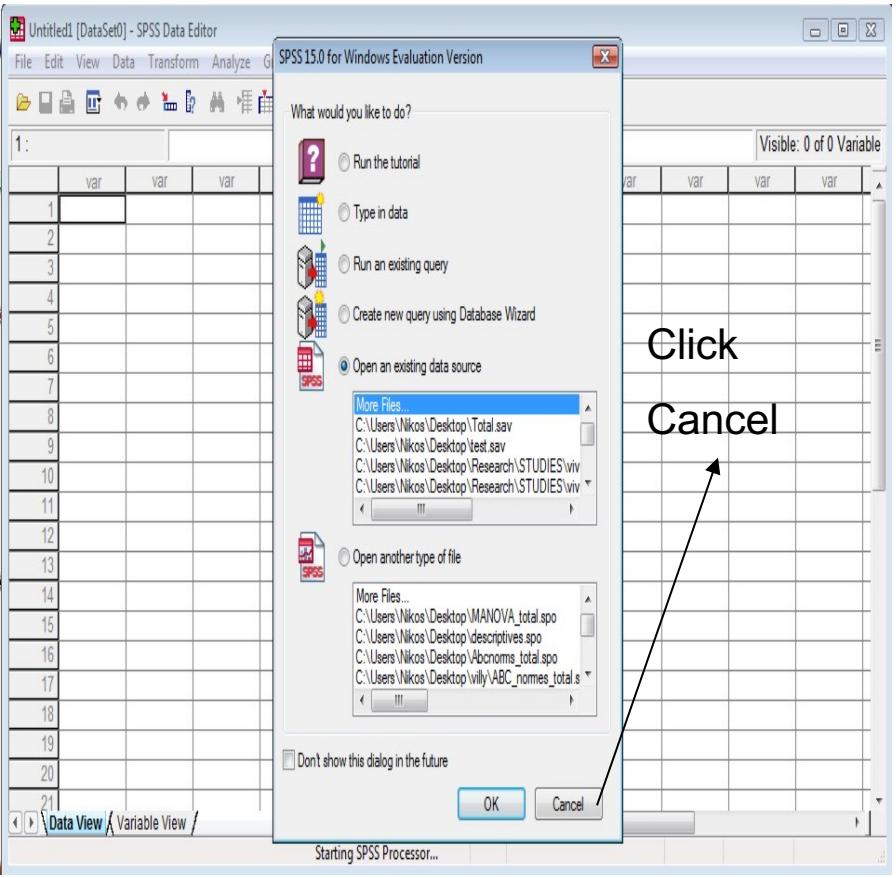
Data handling

SPSS

Nikos Comoutos PhD

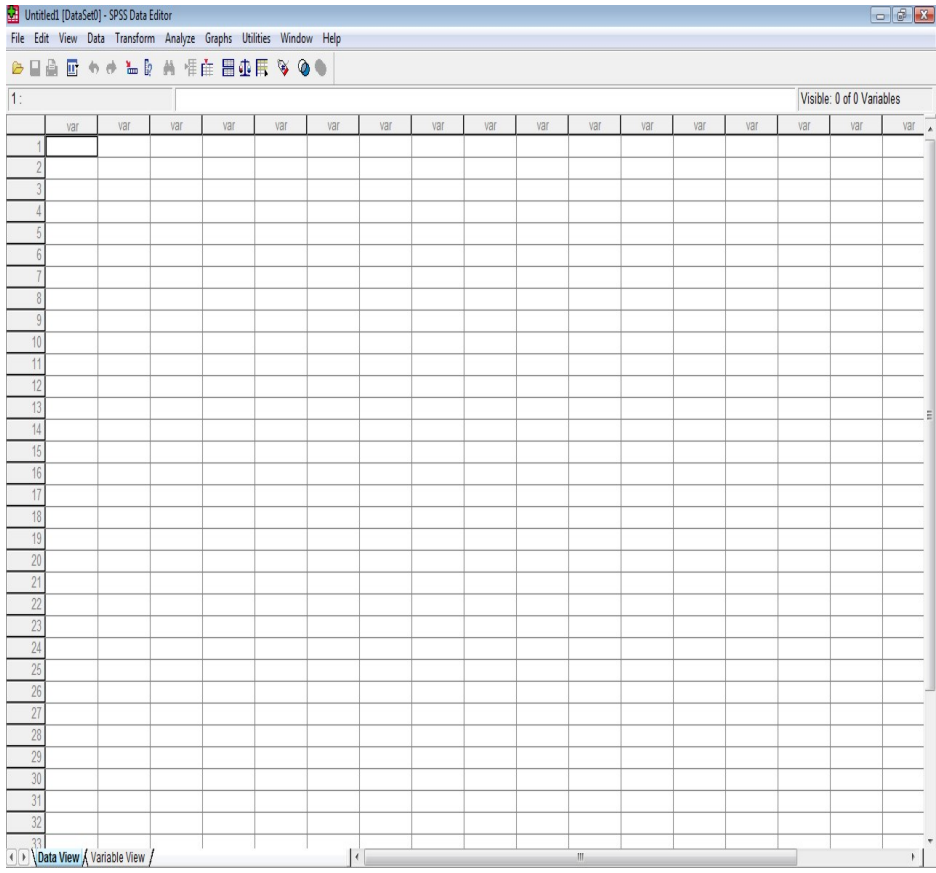
Start menu
Programs
SPSS for Windows
SPSS 15.0 Evaluation Version

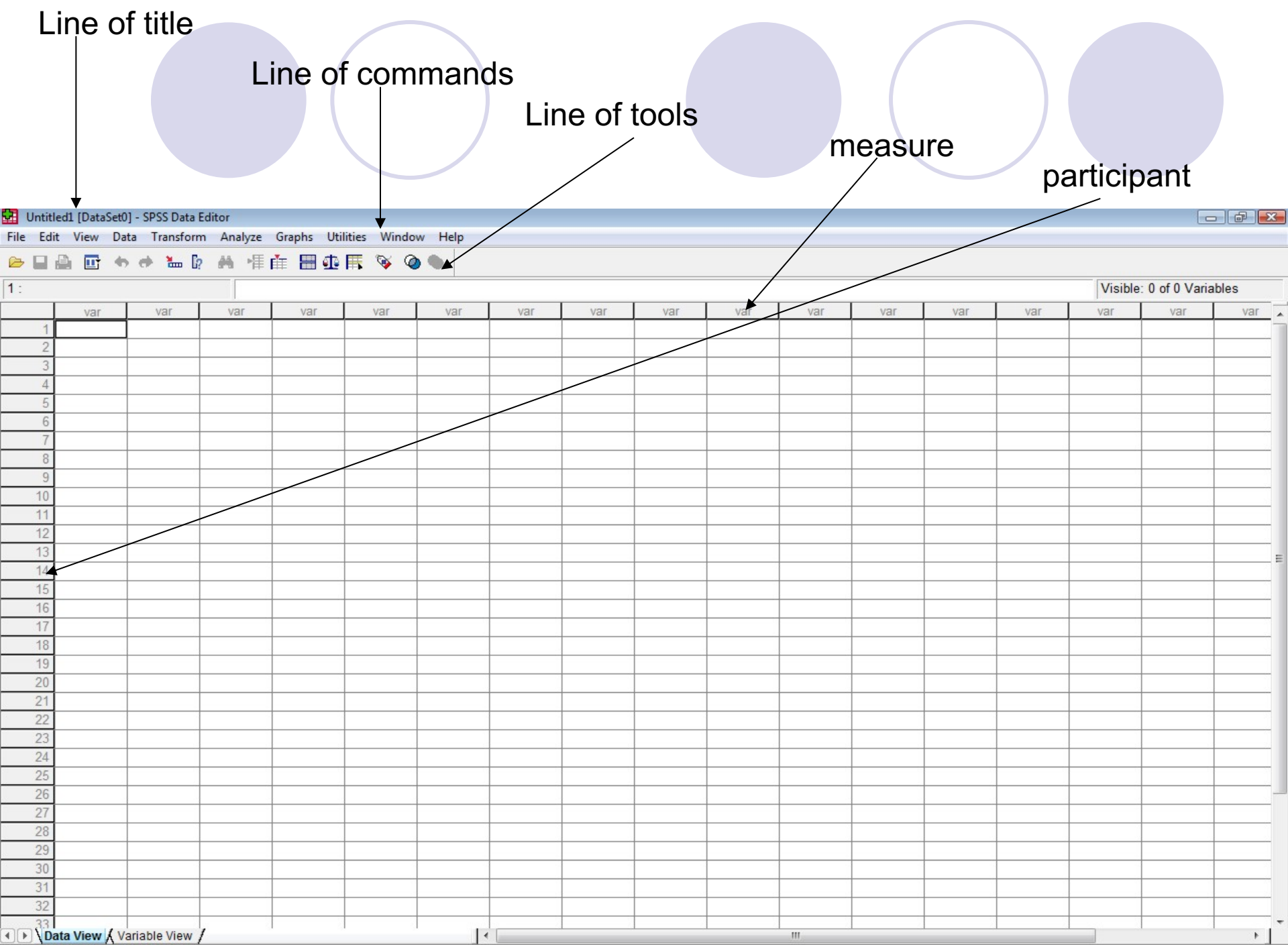
or double click



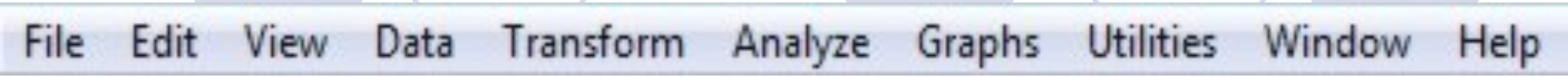
Click

Cancel




Line of title
Line of commands
Line of tools
measure
participant
Untitled1 [DataSet0] - SPSS Data Editor
File Edit View Data Transform Analyze Graphs Utilities Window Help
1 :
Visible: 0 of 0 Variables
var
Data View
Variable View

Commands



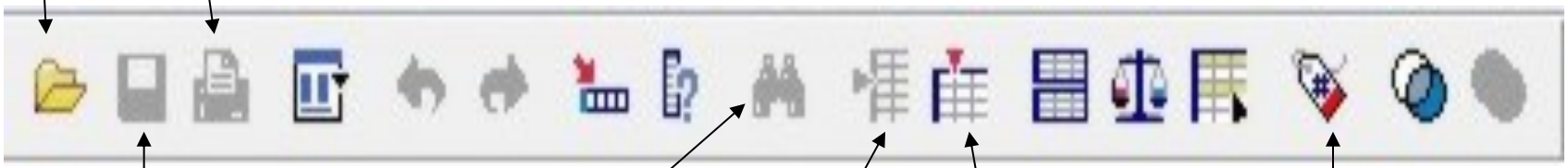
- **File** create or save a data file, open an existing one
- **Edit** transform, copy / paste an existing data file
- **View** change the number of information that exist in our working environment
- **Data** merge files, select cases, sort cases
- **Transform** compute variables, recode variables
- **Analyze** perform statistical tests
- **Graphs** create graphs (bars, histograms)
- Utilities
- **Window,** files that are already open
- Help

Tools

Print

Open file

Shortcuts for commands



Save file

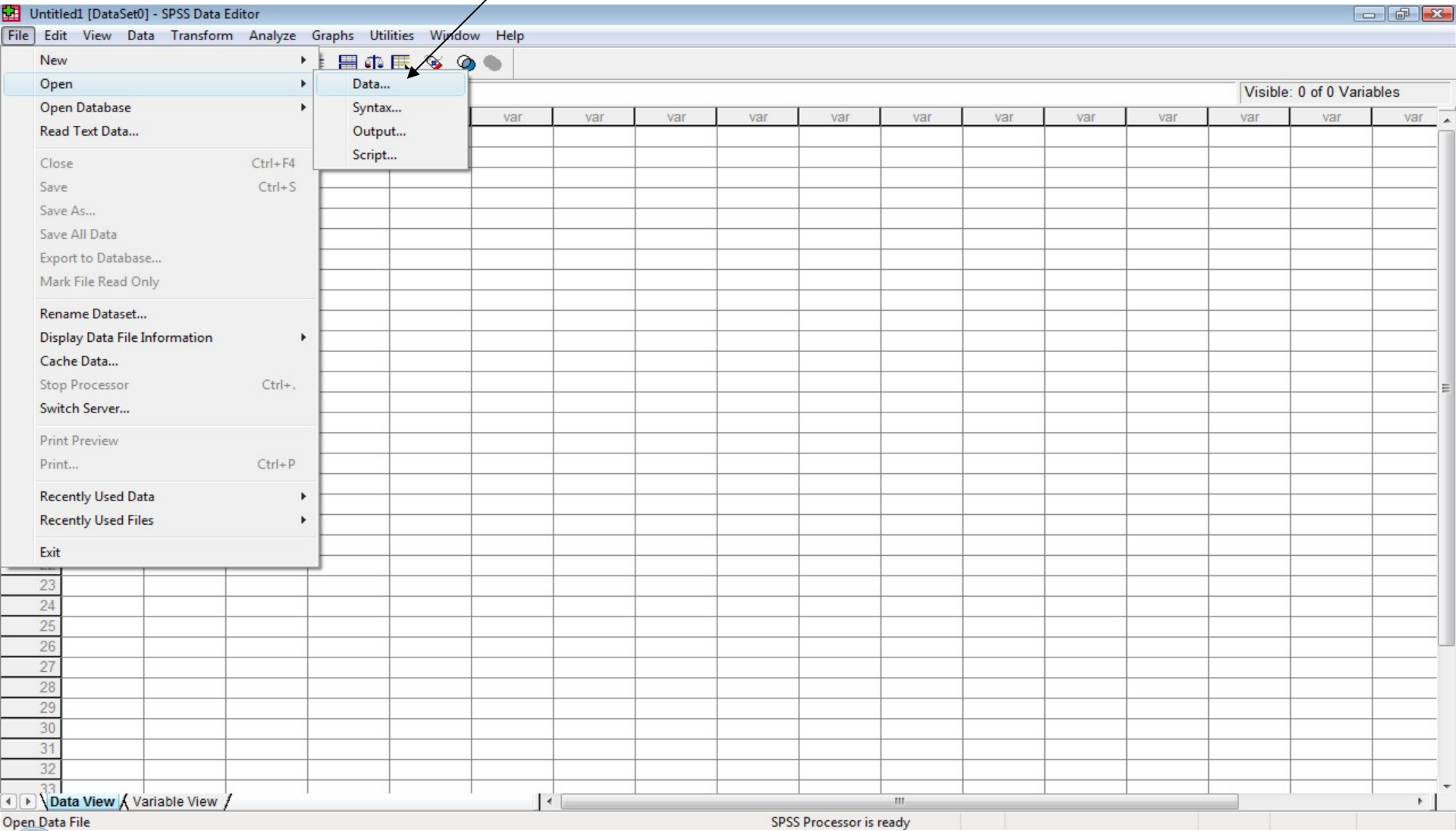
Find

Insert new participant

Insert new variable

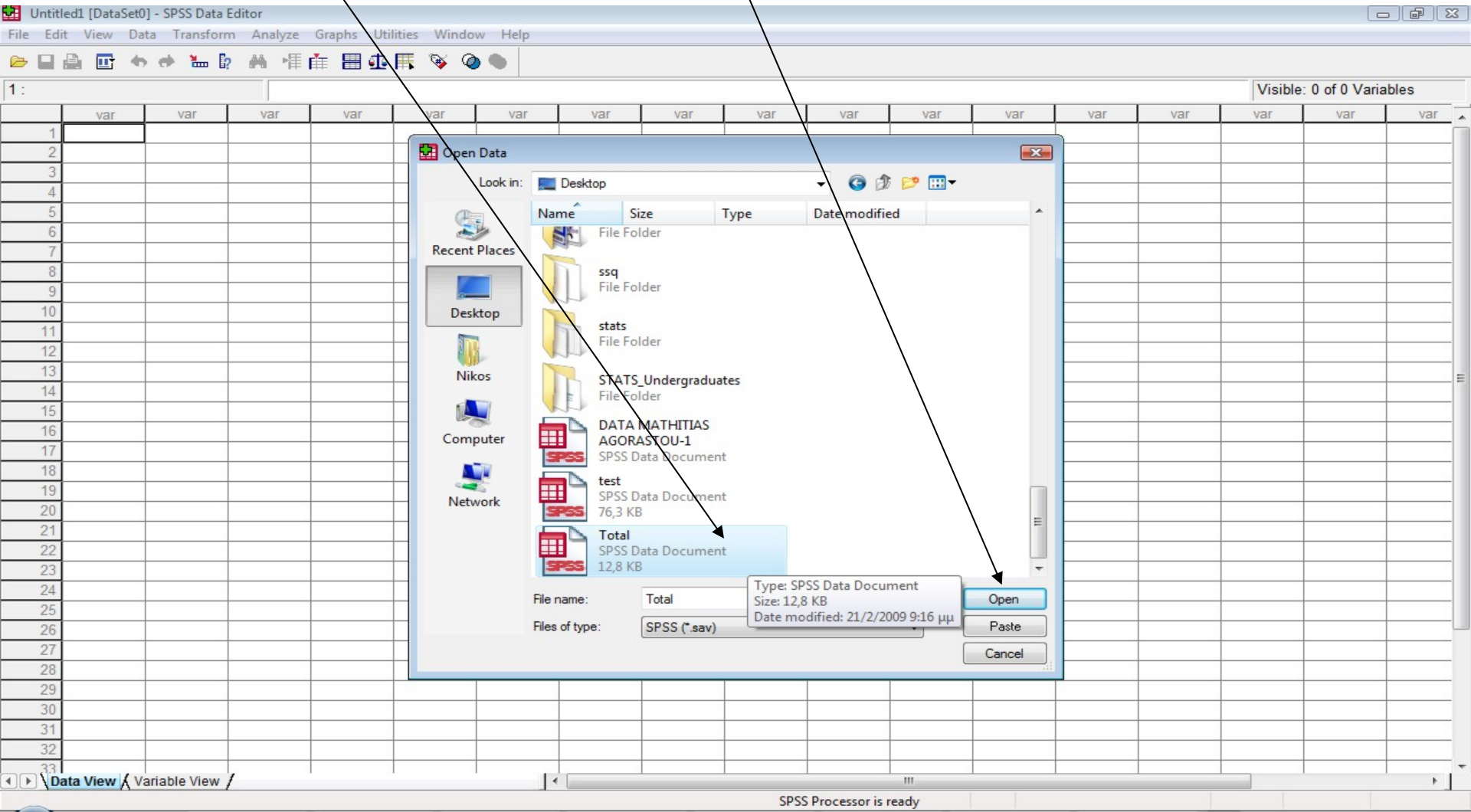
Value labels

Open file .sav that we have saved in a folder or desktop



Left click e.g. file **Total**

Left click - **Open**

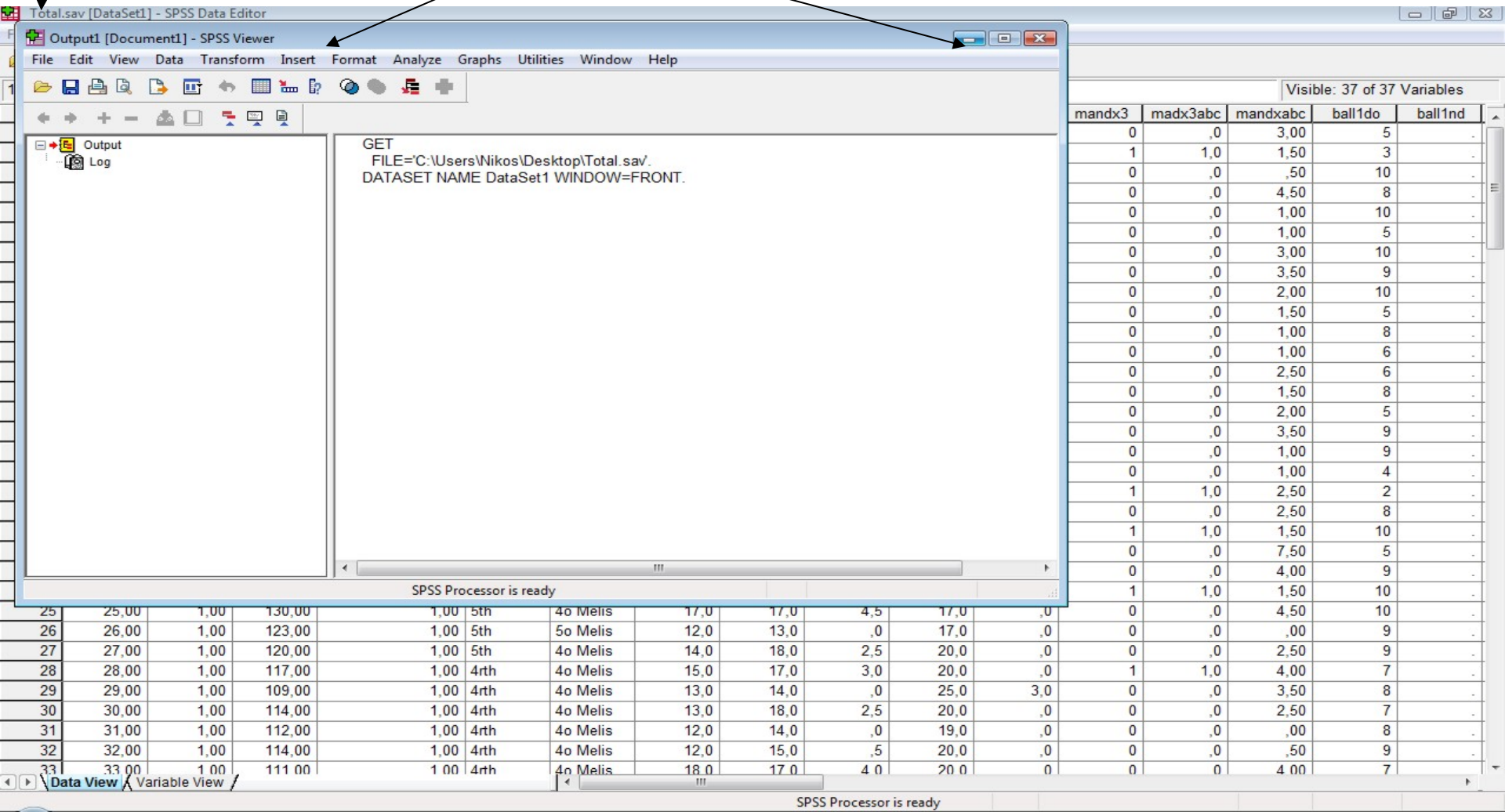


Two windows open

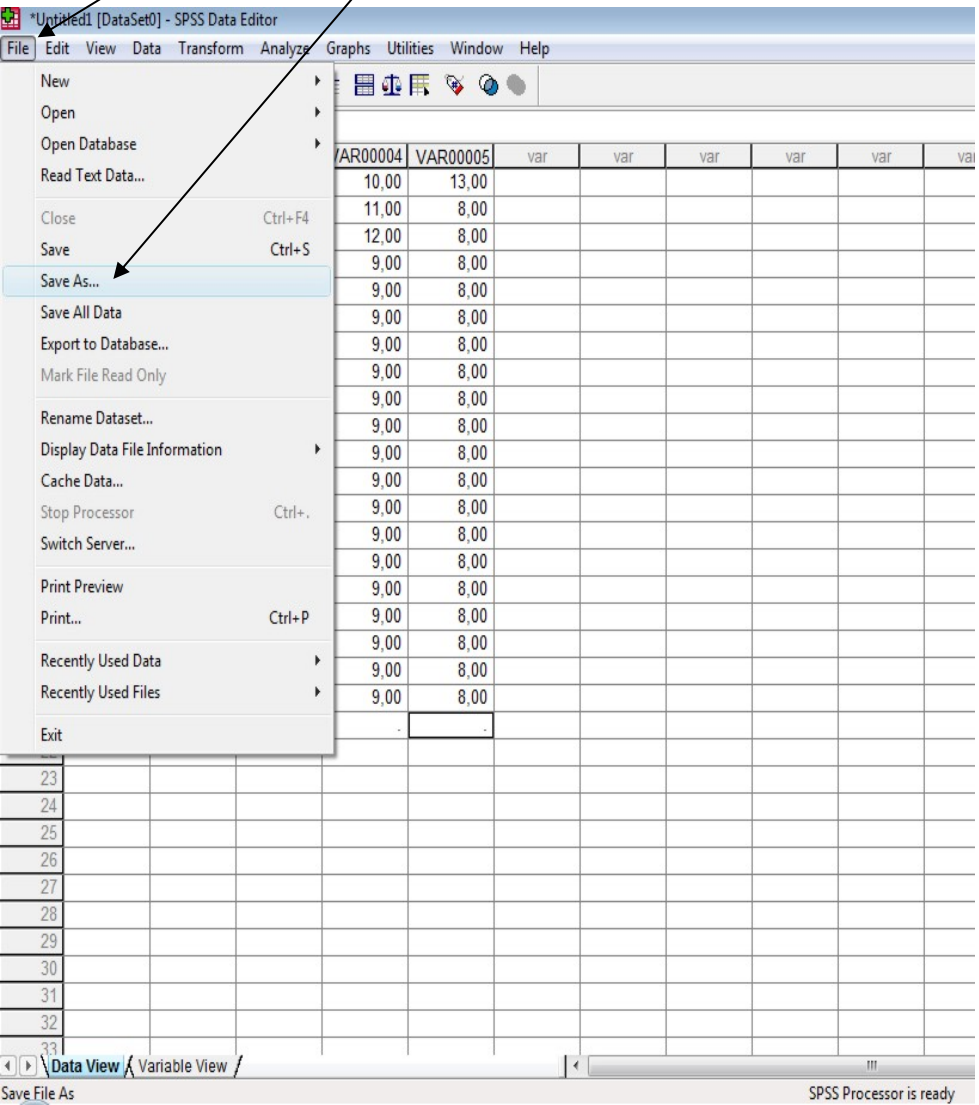
Data file (stores the data *.sav)

Output viewer (*statistical analyses *.spo)* we minimize this window

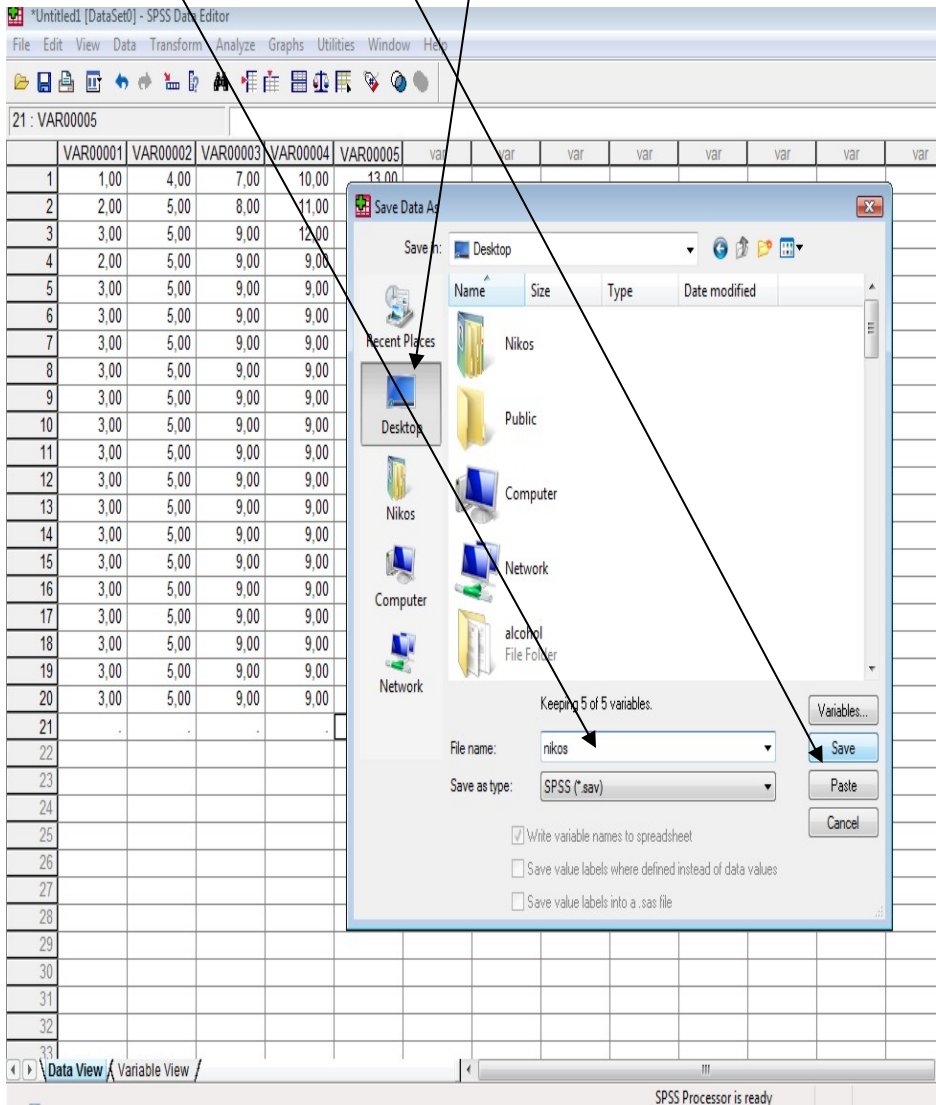
Output – SPSS Viewer stores charts graphs, tables and results of statistical analyses



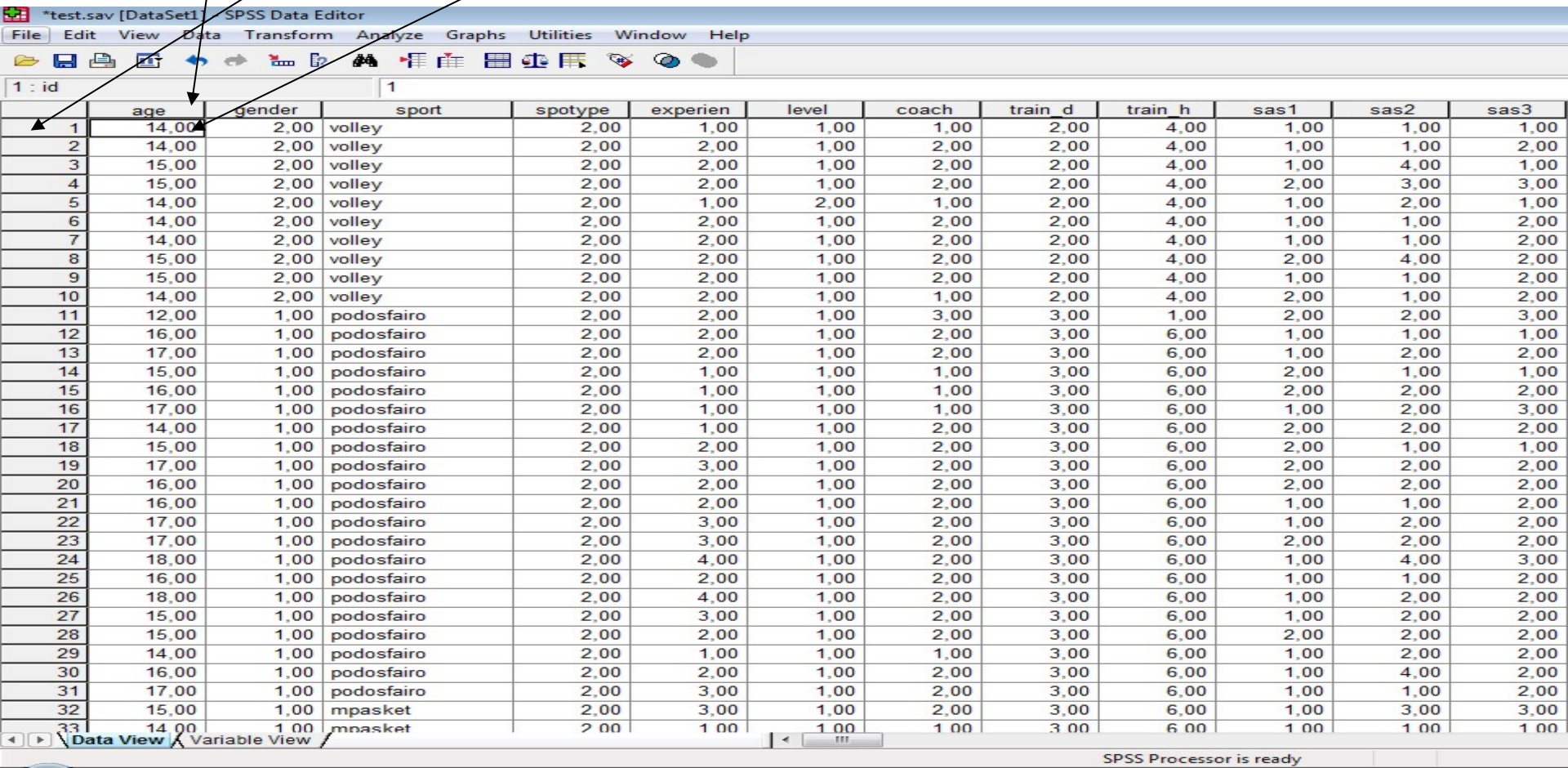
When we want to store a new data set we click **file – save as**



Select for example **desktop** (area that we will save it), write the name of the file e.g., nikos click - **Save,** then **minimize** Output viewer



- Lines (1,2,3,4…) represent cases-participants
- Columns represent (variables), whereas in the cells we enter the values.
- E.g., case 1, variables: age, gender, sport etc., the first value of variable age of the first participant is 14.


*test.sav [DataSet1] - SPSS Data Editor

File Edit View Data Transform Analyze Graphs Utilities Window Help

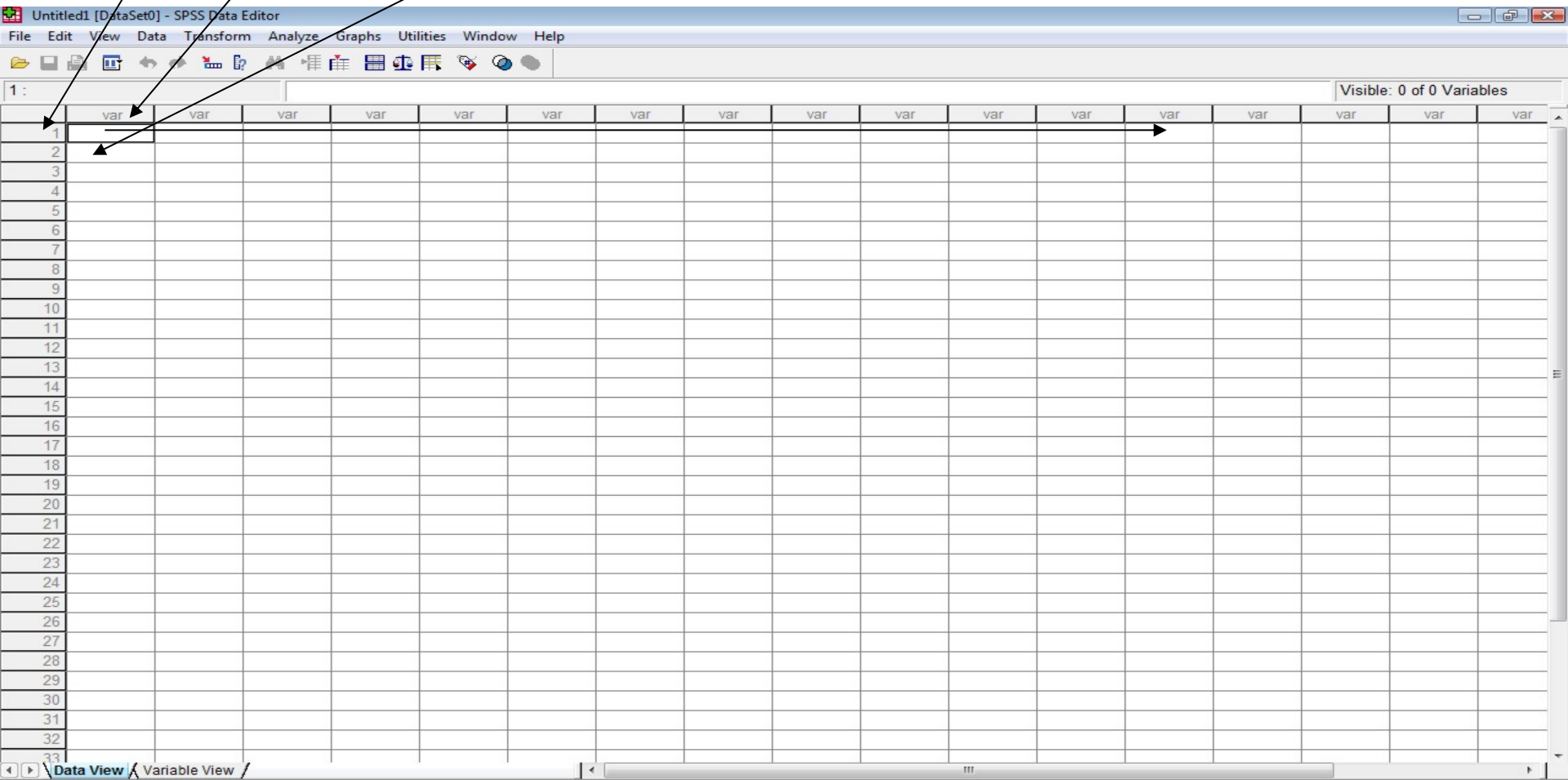
1 : id 1

	age	gender	sport	spotype	experien	level	coach	train_d	train_h	sas1	sas2	sas3
1	14,00	2,00	volley	2,00	1,00	1,00	1,00	2,00	4,00	1,00	1,00	1,00
2	14,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	1,00	1,00	2,00
3	15,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	1,00	4,00	1,00
4	15,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	2,00	3,00	3,00
5	14,00	2,00	volley	2,00	1,00	2,00	1,00	2,00	4,00	1,00	2,00	1,00
6	14,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	1,00	1,00	2,00
7	14,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	1,00	1,00	2,00
8	15,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	2,00	4,00	2,00
9	15,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	1,00	1,00	2,00
10	14,00	2,00	volley	2,00	2,00	1,00	1,00	2,00	4,00	2,00	1,00	2,00
11	12,00	1,00	podosfairo	2,00	2,00	1,00	3,00	3,00	1,00	2,00	2,00	3,00
12	16,00	1,00	podosfairo	2,00	2,00	1,00	2,00	3,00	6,00	1,00	1,00	1,00
13	17,00	1,00	podosfairo	2,00	2,00	1,00	2,00	3,00	6,00	1,00	2,00	2,00
14	15,00	1,00	podosfairo	2,00	1,00	1,00	1,00	3,00	6,00	2,00	1,00	1,00
15	16,00	1,00	podosfairo	2,00	1,00	1,00	1,00	3,00	6,00	2,00	2,00	2,00
16	17,00	1,00	podosfairo	2,00	1,00	1,00	1,00	3,00	6,00	1,00	2,00	3,00
17	14,00	1,00	podosfairo	2,00	1,00	1,00	2,00	3,00	6,00	2,00	2,00	2,00
18	15,00	1,00	podosfairo	2,00	2,00	1,00	2,00	3,00	6,00	2,00	1,00	1,00
19	17,00	1,00	podosfairo	2,00	3,00	1,00	2,00	3,00	6,00	2,00	2,00	2,00
20	16,00	1,00	podosfairo	2,00	2,00	1,00	2,00	3,00	6,00	2,00	2,00	2,00
21	16,00	1,00	podosfairo	2,00	2,00	1,00	2,00	3,00	6,00	1,00	1,00	2,00
22	17,00	1,00	podosfairo	2,00	3,00	1,00	2,00	3,00	6,00	1,00	2,00	2,00
23	17,00	1,00	podosfairo	2,00	3,00	1,00	2,00	3,00	6,00	2,00	2,00	2,00
24	18,00	1,00	podosfairo	2,00	4,00	1,00	2,00	3,00	6,00	1,00	4,00	3,00
25	16,00	1,00	podosfairo	2,00	2,00	1,00	2,00	3,00	6,00	1,00	1,00	2,00
26	18,00	1,00	podosfairo	2,00	4,00	1,00	2,00	3,00	6,00	1,00	2,00	2,00
27	15,00	1,00	podosfairo	2,00	3,00	1,00	2,00	3,00	6,00	1,00	2,00	2,00
28	15,00	1,00	podosfairo	2,00	2,00	1,00	2,00	3,00	6,00	2,00	2,00	2,00
29	14,00	1,00	podosfairo	2,00	1,00	1,00	1,00	3,00	6,00	1,00	2,00	2,00
30	16,00	1,00	podosfairo	2,00	2,00	1,00	2,00	3,00	6,00	1,00	4,00	2,00
31	17,00	1,00	podosfairo	2,00	3,00	1,00	2,00	3,00	6,00	1,00	1,00	2,00
32	15,00	1,00	mpasket	2,00	3,00	1,00	2,00	3,00	6,00	1,00	3,00	3,00
33	14,00	1,00	mpasket	2,00	1,00	1,00	1,00	3,00	6,00	1,00	1,00	1,00

Data View Variable View

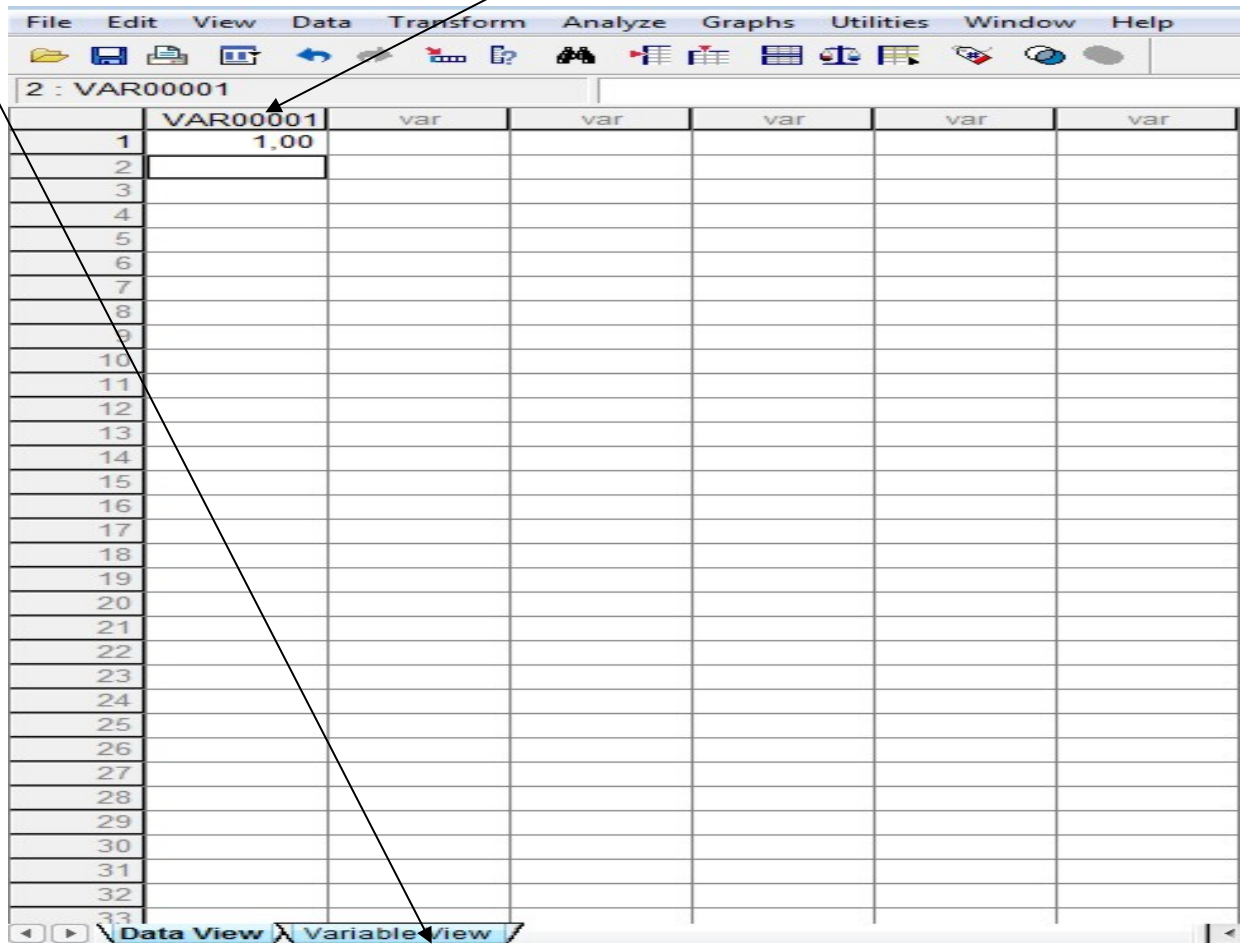
SPSS Processor is ready

Each row represent a different participant and each column should correspond to a different measure (e.g., age, gender) of a particular case or participant.
You should enter new data horizontally until all measures of the first participant have been inserted and then you can go to the second row and enter the data for the second participant

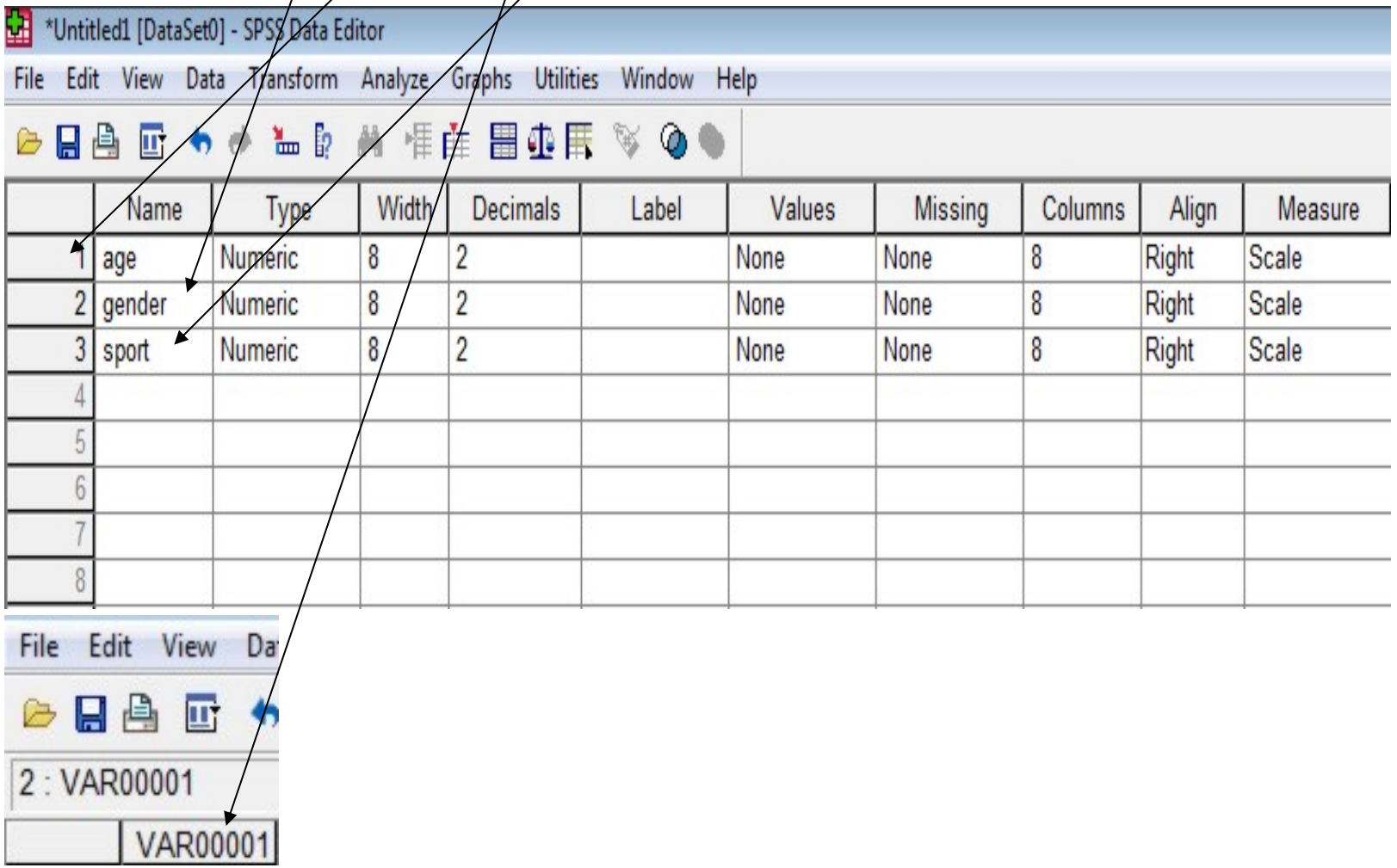


Label of variable

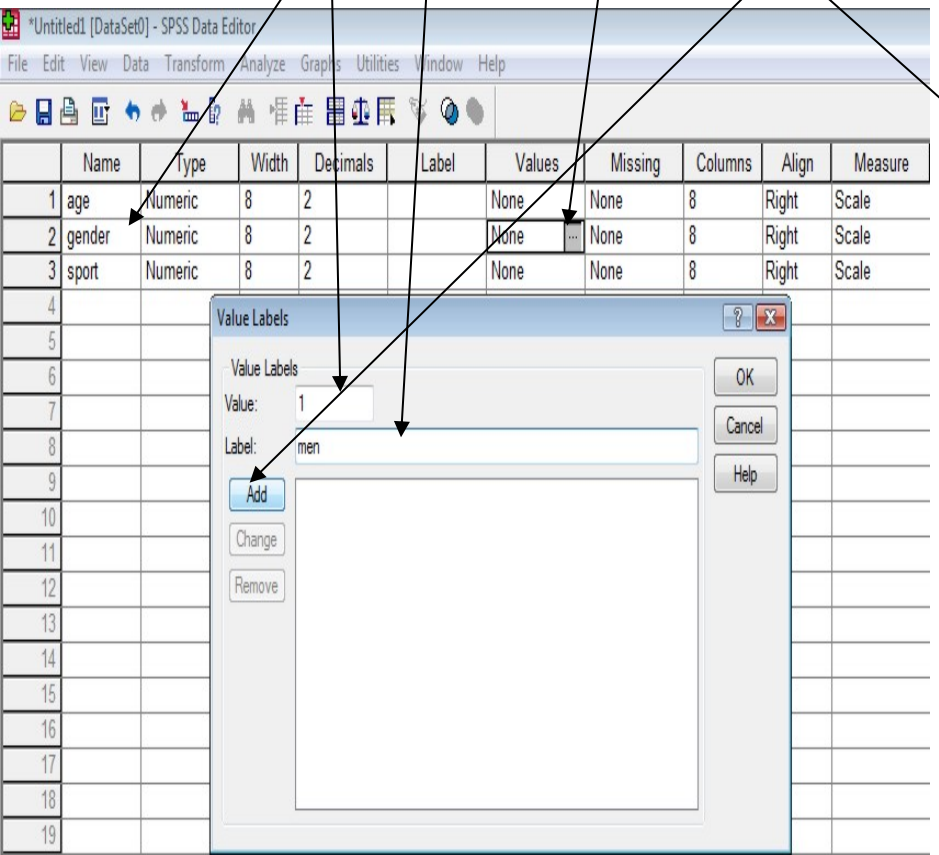
- If we don't label our variables SPSS defines them as VAR00001, etc. It is important to label all variables (e.g., age, gender) and give details about their format.
- **Click variable view**

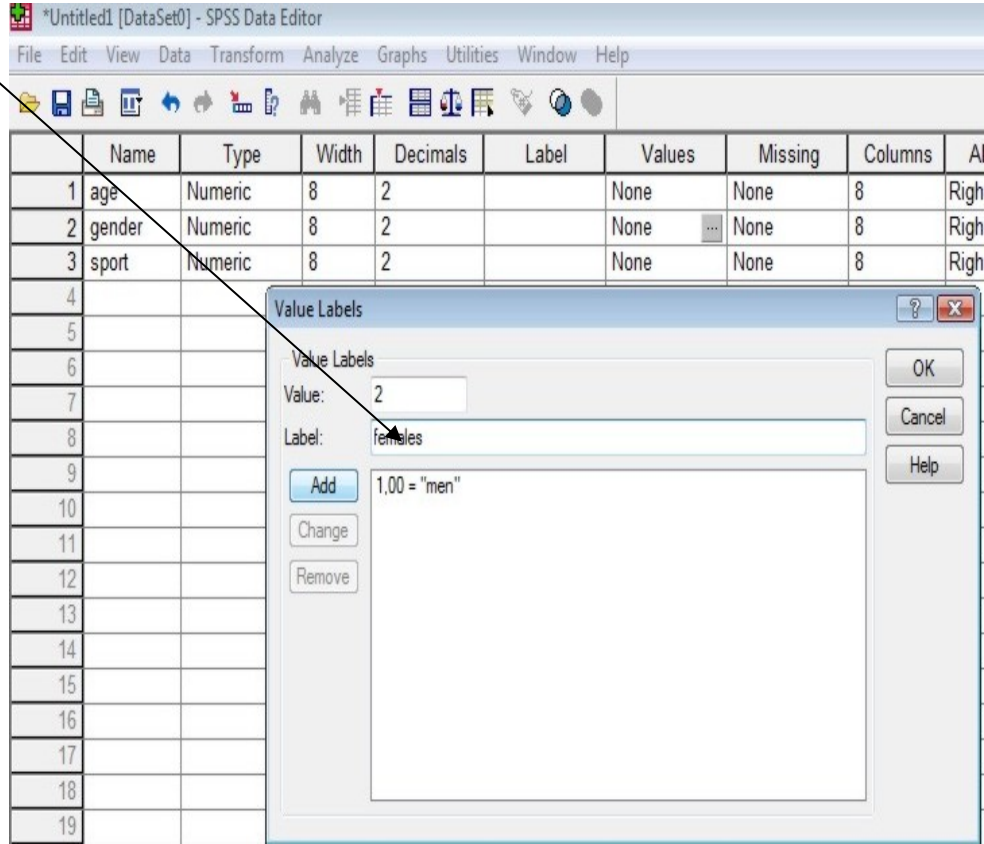


- E.g., write age instead of VAR00001 for variable 1 which correspond to the age of the first participant. 1 does not correspond to participant 1 but to variable 1 (VAR00001) of the data viewer. Below write the second variable for example Gender, the third Sport etc.

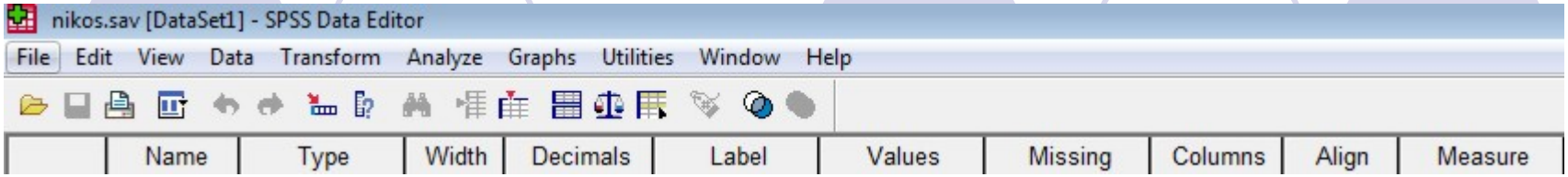


- VAR00002 write gender. Click *Values* to label the values of a variable. Click to activate the button… The variable gender describes the gender of the participant. Each gender has been given a code and a description (e.g., code 1 for men). After you label men click *Add* and carry one with the same way about *females.* If you want to view the labels instead of values click *Value Labels* option in the *View menu.*



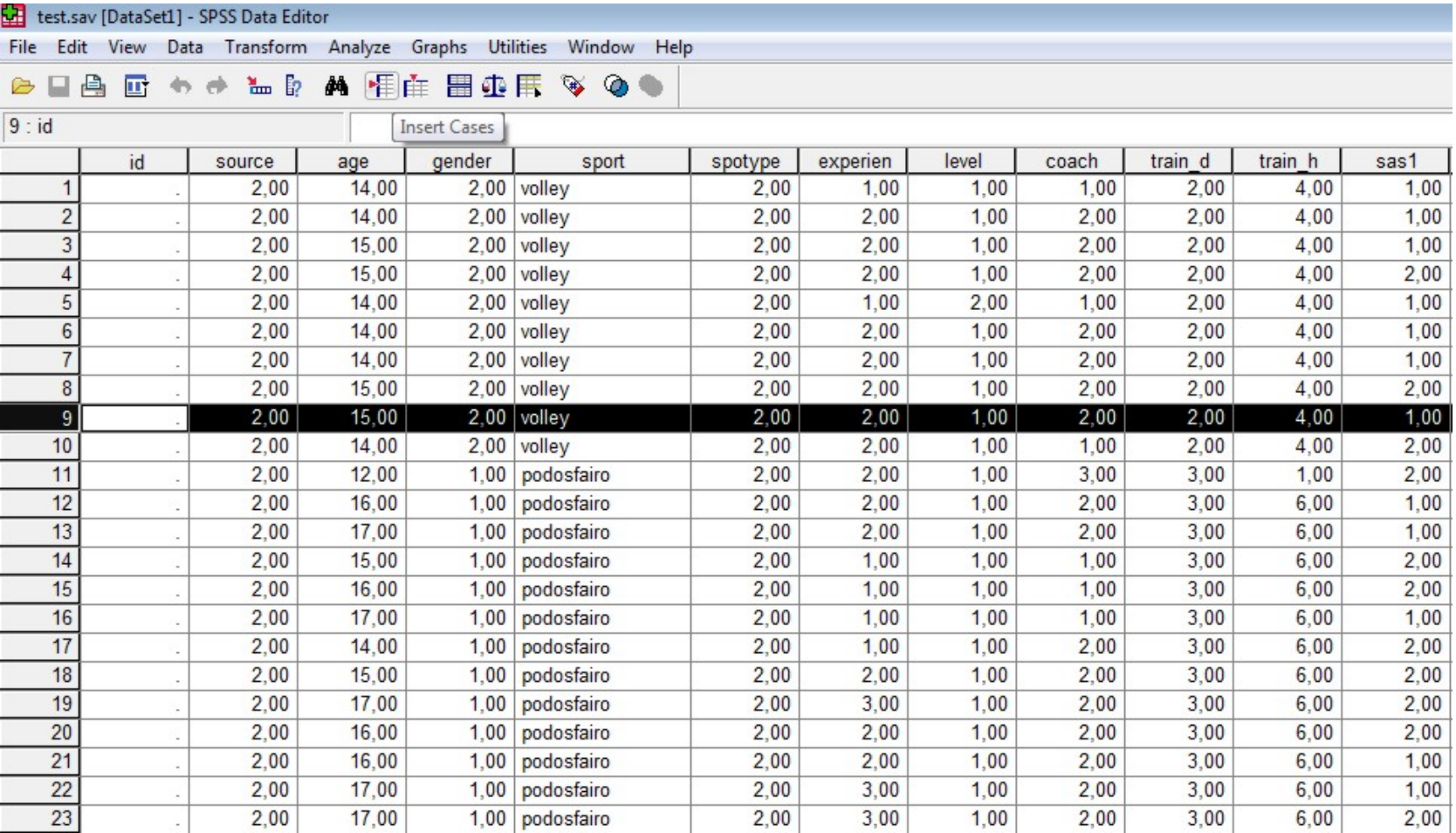


Variable view



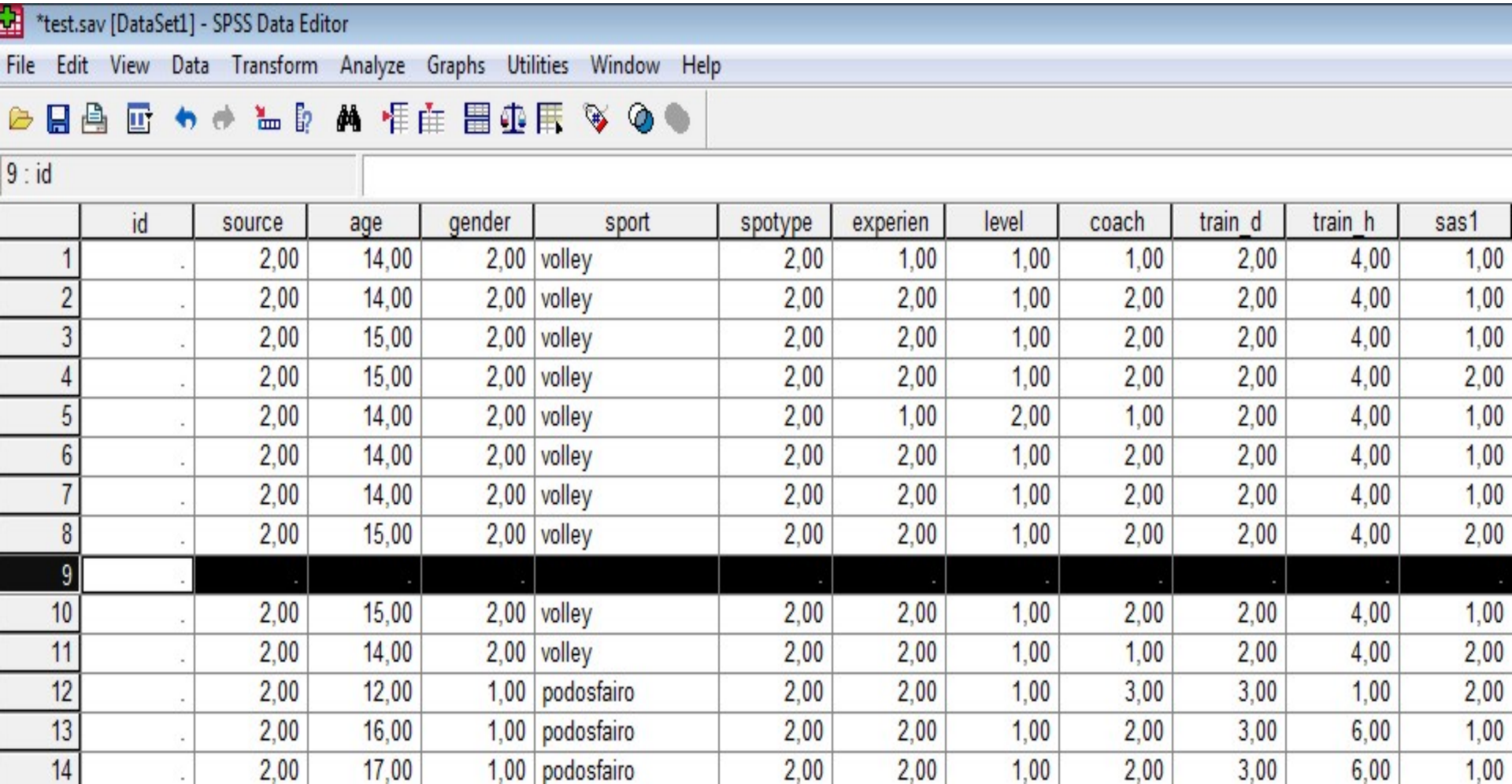
- Name. We give a short name. No more than eight characters long.
- Type. Specify the type of a variable. Click on the button …to select **string** option if a variable is nominal (letters instead of numbers or combination of letter and numbers) and **numeric** if a variable consists of numbers only.
- Decimals. Lets you specify the number of decimals.
- Labels. Detailed description of a variable (no restriction of characters)
- Values. Label the values of a variable (see slide 14)
- Missing. If a variable has values ranging from 0-4, you can use the number 9 as a code to indicate missing values.
- Columns and Align. Specify the width of a column and the alignment of the values in the column.
- Measure. Scale represents numeric variables. We usually use scale (interval or ratio scale). An interval scale has equal intervals but there is no absolute zero. In contrast a ratio scale has equal intervals as well as an absolute zero. Ordinal refers to a ranking of variables but no indication of how much better one variable is compared to another (e.g., high, medium, low). Nominal = distinct groups e.g., males and females.

Insert new case



	id	source	age	gender	sport	spotype	experien	level	coach	train_d	train_h	sas1
1	.	2,00	14,00	2,00	volley	2,00	1,00	1,00	1,00	2,00	4,00	1,00
2	.	2,00	14,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	1,00
3	.	2,00	15,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	1,00
4	.	2,00	15,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	2,00
5	.	2,00	14,00	2,00	volley	2,00	1,00	2,00	1,00	2,00	4,00	1,00
6	.	2,00	14,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	1,00
7	.	2,00	14,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	1,00
8	.	2,00	15,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	2,00
9	.	2,00	15,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	1,00
10	.	2,00	14,00	2,00	volley	2,00	2,00	1,00	1,00	2,00	4,00	2,00
11	.	2,00	12,00	1,00	podosfairo	2,00	2,00	1,00	3,00	3,00	1,00	2,00
12	.	2,00	16,00	1,00	podosfairo	2,00	2,00	1,00	2,00	3,00	6,00	1,00
13	.	2,00	17,00	1,00	podosfairo	2,00	2,00	1,00	2,00	3,00	6,00	1,00
14	.	2,00	15,00	1,00	podosfairo	2,00	1,00	1,00	1,00	3,00	6,00	2,00
15	.	2,00	16,00	1,00	podosfairo	2,00	1,00	1,00	1,00	3,00	6,00	2,00
16	.	2,00	17,00	1,00	podosfairo	2,00	1,00	1,00	1,00	3,00	6,00	1,00
17	.	2,00	14,00	1,00	podosfairo	2,00	1,00	1,00	2,00	3,00	6,00	2,00
18	.	2,00	15,00	1,00	podosfairo	2,00	2,00	1,00	2,00	3,00	6,00	2,00
19	.	2,00	17,00	1,00	podosfairo	2,00	3,00	1,00	2,00	3,00	6,00	2,00
20	.	2,00	16,00	1,00	podosfairo	2,00	2,00	1,00	2,00	3,00	6,00	2,00
21	.	2,00	16,00	1,00	podosfairo	2,00	2,00	1,00	2,00	3,00	6,00	1,00
22	.	2,00	17,00	1,00	podosfairo	2,00	3,00	1,00	2,00	3,00	6,00	1,00
23	.	2,00	17,00	1,00	podosfairo	2,00	3,00	1,00	2,00	3,00	6,00	2,00

- click **Insert cases**

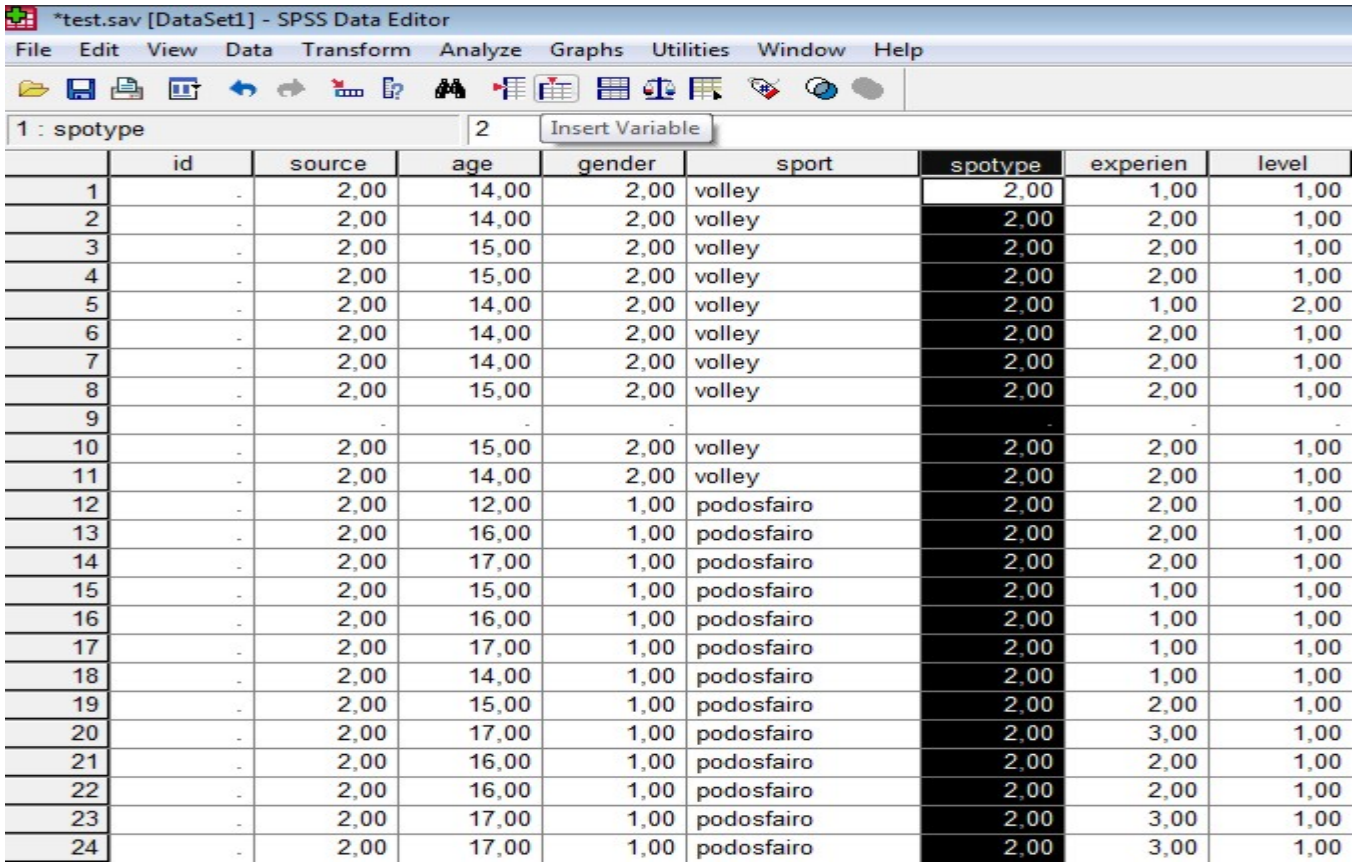

*test.sav [DataSet1] - SPSS Data Editor

File Edit View Data Transform Analyze Graphs Utilities Window Help

9 : id

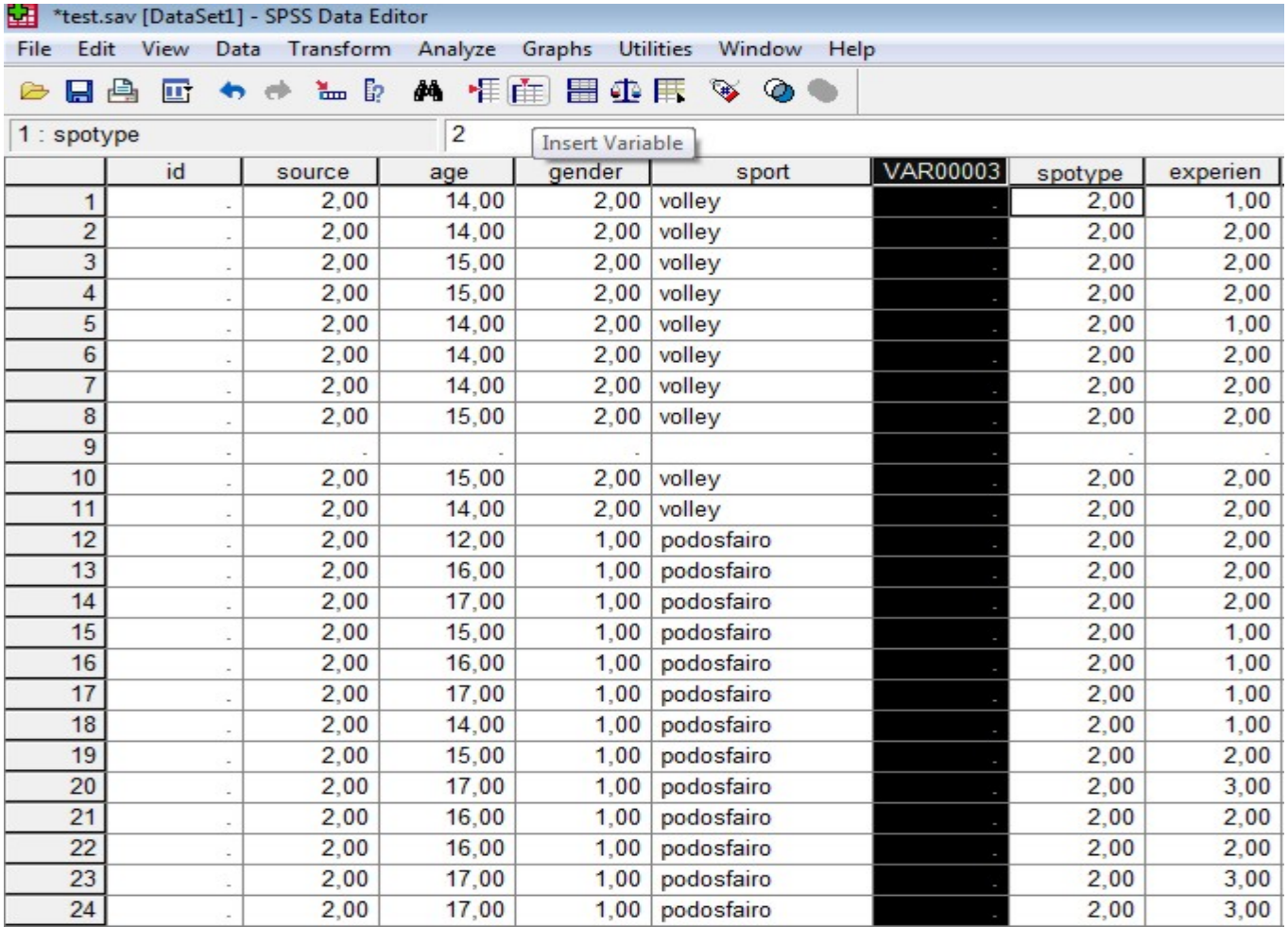
	id	source	age	gender	sport	spotype	experien	level	coach	train_d	train_h	sas1
1	.	2,00	14,00	2,00	volley	2,00	1,00	1,00	1,00	2,00	4,00	1,00
2	.	2,00	14,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	1,00
3	.	2,00	15,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	1,00
4	.	2,00	15,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	2,00
5	.	2,00	14,00	2,00	volley	2,00	1,00	2,00	1,00	2,00	4,00	1,00
6	.	2,00	14,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	1,00
7	.	2,00	14,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	1,00
8	.	2,00	15,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	2,00
9	.	.	.	.		.	.	.	.	.	.	.
10	.	2,00	15,00	2,00	volley	2,00	2,00	1,00	2,00	2,00	4,00	1,00
11	.	2,00	14,00	2,00	volley	2,00	2,00	1,00	1,00	2,00	4,00	2,00
12	.	2,00	12,00	1,00	podosfairo	2,00	2,00	1,00	3,00	3,00	1,00	2,00
13	.	2,00	16,00	1,00	podosfairo	2,00	2,00	1,00	2,00	3,00	6,00	1,00
14	.	2,00	17,00	1,00	podosfairo	2,00	2,00	1,00	2,00	3,00	6,00	1,00

Insert variable



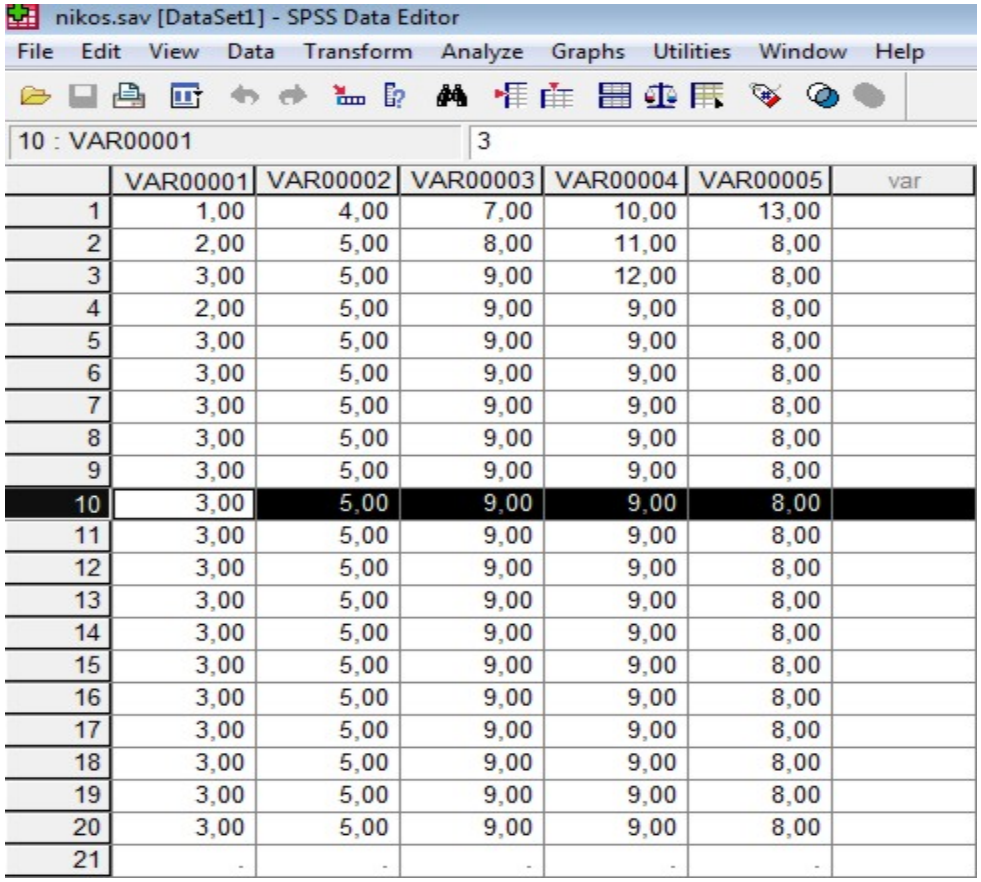
	id	source	age	gender	sport	spotype	experien	level
1	.	2,00	14,00	2,00	volley	2,00	1,00	1,00
2	.	2,00	14,00	2,00	volley	2,00	2,00	1,00
3	.	2,00	15,00	2,00	volley	2,00	2,00	1,00
4	.	2,00	15,00	2,00	volley	2,00	2,00	1,00
5	.	2,00	14,00	2,00	volley	2,00	1,00	2,00
6	.	2,00	14,00	2,00	volley	2,00	2,00	1,00
7	.	2,00	14,00	2,00	volley	2,00	2,00	1,00
8	.	2,00	15,00	2,00	volley	2,00	2,00	1,00
9	.	.	.	.		.	.	.
10	.	2,00	15,00	2,00	volley	2,00	2,00	1,00
11	.	2,00	14,00	2,00	volley	2,00	2,00	1,00
12	.	2,00	12,00	1,00	podosfairo	2,00	2,00	1,00
13	.	2,00	16,00	1,00	podosfairo	2,00	2,00	1,00
14	.	2,00	17,00	1,00	podosfairo	2,00	2,00	1,00
15	.	2,00	15,00	1,00	podosfairo	2,00	1,00	1,00
16	.	2,00	16,00	1,00	podosfairo	2,00	1,00	1,00
17	.	2,00	17,00	1,00	podosfairo	2,00	1,00	1,00
18	.	2,00	14,00	1,00	podosfairo	2,00	1,00	1,00
19	.	2,00	15,00	1,00	podosfairo	2,00	2,00	1,00
20	.	2,00	17,00	1,00	podosfairo	2,00	3,00	1,00
21	.	2,00	16,00	1,00	podosfairo	2,00	2,00	1,00
22	.	2,00	16,00	1,00	podosfairo	2,00	2,00	1,00
23	.	2,00	17,00	1,00	podosfairo	2,00	3,00	1,00
24	.	2,00	17,00	1,00	podosfairo	2,00	3,00	1,00

- Click to **Insert variable**



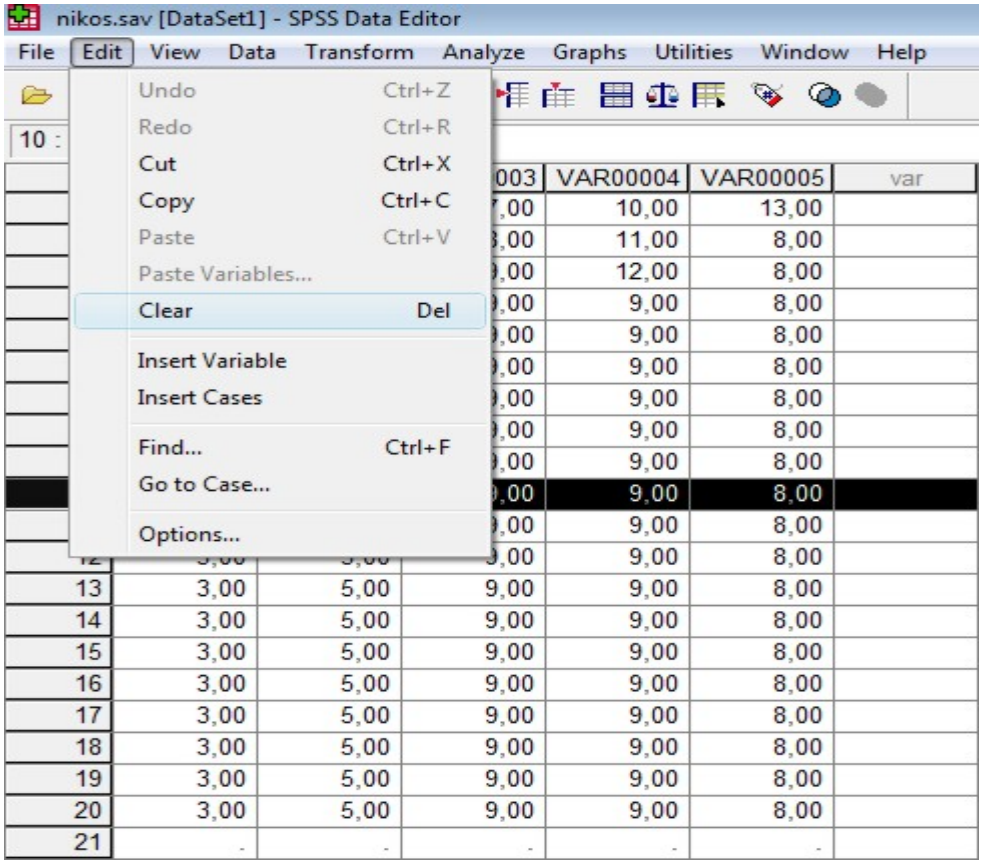
	id	source	age	gender	sport	VAR00003	spotype	experien
1	.	2,00	14,00	2,00	volley	.	2,00	1,00
2	.	2,00	14,00	2,00	volley	.	2,00	2,00
3	.	2,00	15,00	2,00	volley	.	2,00	2,00
4	.	2,00	15,00	2,00	volley	.	2,00	2,00
5	.	2,00	14,00	2,00	volley	.	2,00	1,00
6	.	2,00	14,00	2,00	volley	.	2,00	2,00
7	.	2,00	14,00	2,00	volley	.	2,00	2,00
8	.	2,00	15,00	2,00	volley	.	2,00	2,00
9	.	.	.	.		.	.	.
10	.	2,00	15,00	2,00	volley	.	2,00	2,00
11	.	2,00	14,00	2,00	volley	.	2,00	2,00
12	.	2,00	12,00	1,00	podosfairo	.	2,00	2,00
13	.	2,00	16,00	1,00	podosfairo	.	2,00	2,00
14	.	2,00	17,00	1,00	podosfairo	.	2,00	2,00
15	.	2,00	15,00	1,00	podosfairo	.	2,00	1,00
16	.	2,00	16,00	1,00	podosfairo	.	2,00	1,00
17	.	2,00	17,00	1,00	podosfairo	.	2,00	1,00
18	.	2,00	14,00	1,00	podosfairo	.	2,00	1,00
19	.	2,00	15,00	1,00	podosfairo	.	2,00	2,00
20	.	2,00	17,00	1,00	podosfairo	.	2,00	3,00
21	.	2,00	16,00	1,00	podosfairo	.	2,00	2,00
22	.	2,00	16,00	1,00	podosfairo	.	2,00	2,00
23	.	2,00	17,00	1,00	podosfairo	.	2,00	3,00
24	.	2,00	17,00	1,00	podosfairo	.	2,00	3,00

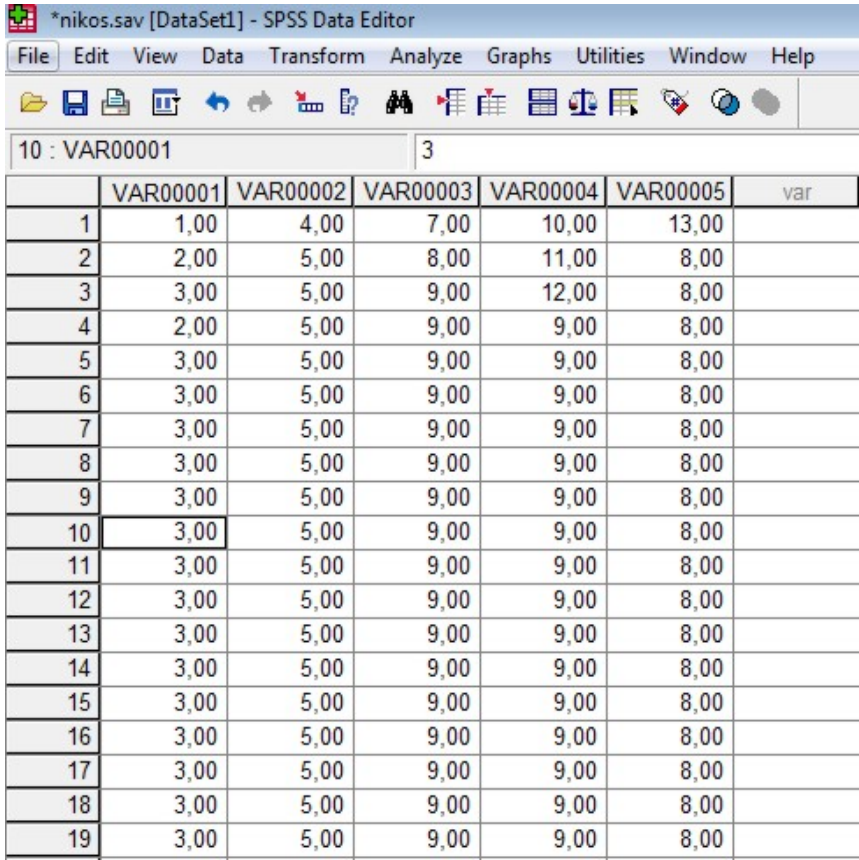
Delete cases



	VAR00001	VAR00002	VAR00003	VAR00004	VAR00005	var
1	1,00	4,00	7,00	10,00	13,00	
2	2,00	5,00	8,00	11,00	8,00	
3	3,00	5,00	9,00	12,00	8,00	
4	2,00	5,00	9,00	9,00	8,00	
5	3,00	5,00	9,00	9,00	8,00	
6	3,00	5,00	9,00	9,00	8,00	
7	3,00	5,00	9,00	9,00	8,00	
8	3,00	5,00	9,00	9,00	8,00	
9	3,00	5,00	9,00	9,00	8,00	
10	3,00	5,00	9,00	9,00	8,00	
11	3,00	5,00	9,00	9,00	8,00	
12	3,00	5,00	9,00	9,00	8,00	
13	3,00	5,00	9,00	9,00	8,00	
14	3,00	5,00	9,00	9,00	8,00	
15	3,00	5,00	9,00	9,00	8,00	
16	3,00	5,00	9,00	9,00	8,00	
17	3,00	5,00	9,00	9,00	8,00	
18	3,00	5,00	9,00	9,00	8,00	
19	3,00	5,00	9,00	9,00	8,00	
20	3,00	5,00	9,00	9,00	8,00	
21	.	.	.	.	.	

- Click Edit – Clear or Delete





Data

- Sort cases. Sort the values of one or more variables in an ascending or descending order. Using this option you can group together for example gender 1 males and then 2 females.
- Select cases. Analyze separately for example females. Select cases, click of the variable of interest (e.g., females) then click *If condition is satisfied.* Then click *If…* select gender and click on the arrow button to move it to the opposite box. Type gender = 2, click *continue and* then *ok*

Time for practice