

SPSS

Basics

(A Text Tutorial)



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ADDING VARIABLES - COMPUTE PROCEDURE

Path

Transform – Compute variable

	Q1	Q2	Q3	Q4	Q5	var
1	6.00	7.00	6.00	5.00	7.00	
2	3.00	4.00	3.00	2.00	3.00	
3	5.00	6.00	4.00	5.00	5.00	
4	7.00	7.00	7.00	7.00	7.00	
5	7.00	6.00	5.00	6.00	7.00	
6	7.00	6.00	5.00	6.00	7.00	
7	7.00	6.00	7.00	7.00	6.00	
8	5.00	6.00	5.00	7.00	6.00	
9	7.00	6.00	7.00	7.00	6.00	
10	3.00	2.00	3.00	4.00	5.00	
11						
12						
13						
14						
15						
16						

The 'Transform' menu is open, showing the following options:

- Compute Variable...
- Programmability Transformation...
- Count Values within Cases...
- Shift Values...
- Recode into Same Variables...
- Recode into Different Variables...
- Automatic Recode...
- Create Dummy Variables
- Visual Binning...
- Optimal Binning...
- Prepare Data for Modeling
- Rank Cases...
- Date and Time Wizard...
- Create Time Series...
- Replace Missing Values...
- Random Number Generators...
- Run Pending Transforms (Ctrl+G)

The 'Compute Variable' dialog box is shown with the following details:

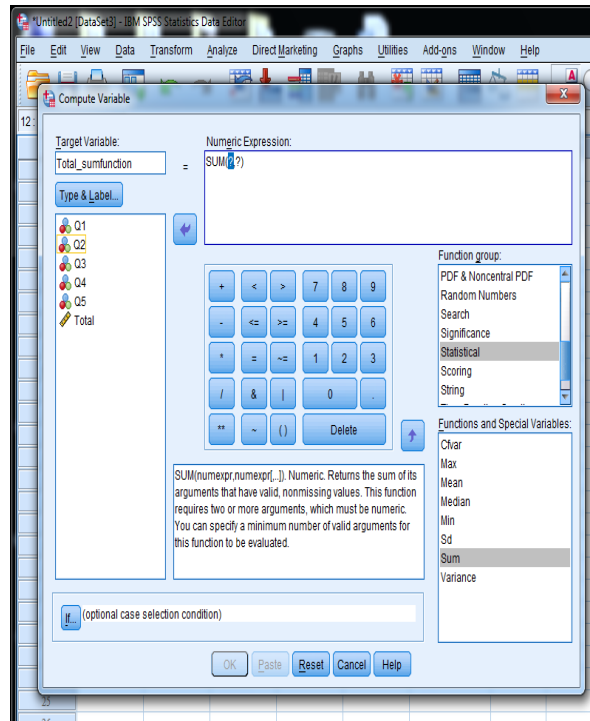
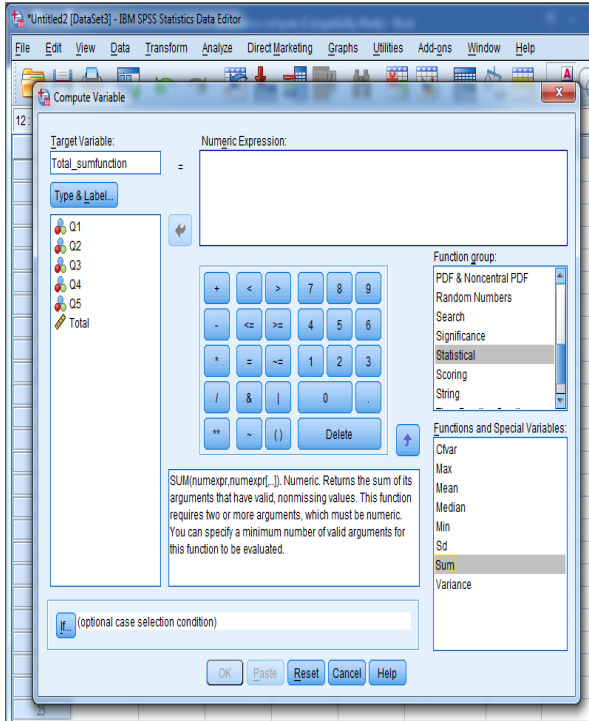
- Target Variable: Total
- Numeric Expression: Q1 + Q2 + Q3 + Q4 + Q5
- Function group: All
- Buttons: OK, Paste, Reset, Cancel, Help

	Q1	Q2	Q3	Q4	Q5	Total	var
1	6.00	7.00	6.00	5.00	7.00	31.00	
2	3.00	4.00	3.00	2.00	3.00	15.00	
3	5.00	6.00	4.00	5.00	5.00	25.00	
4	7.00	7.00	7.00	7.00	7.00	35.00	
5	7.00	6.00	5.00	6.00	7.00	31.00	
6	7.00	6.00	5.00	6.00	7.00	31.00	
7	7.00	6.00	7.00	7.00	6.00	33.00	
8	5.00	6.00	5.00	7.00	6.00	29.00	
9	7.00	6.00	7.00	7.00	6.00	33.00	
10	3.00	2.00	3.00	4.00	5.00	17.00	
11							
12							
13							
14							
15							
16							
17							
18							

ADDING VARIABLES – SUM FUNCTION

Path

Transform – Compute variable (Function – statistics – sum)



	Q1	Q2	Q3	Q4	Q5	Total	Total_sumfunction	var	var	var	var	var	var
1	6.00	7.00	6.00	5.00	7.00	31.00	31.00						
2	3.00	4.00	3.00	2.00	3.00	15.00	15.00						
3	5.00	6.00	4.00	5.00	5.00	25.00	25.00						
4	7.00	7.00	7.00	7.00	7.00	35.00	35.00						
5	7.00	6.00	5.00	6.00	7.00	31.00	31.00						
6	7.00	6.00	5.00	6.00	7.00	31.00	31.00						
7	7.00	6.00	7.00	7.00	6.00	33.00	33.00						
8	5.00	6.00	5.00	7.00	6.00	29.00	29.00						
9	7.00	6.00	7.00	7.00			27.00						
10	3.00	2.00	3.00	4.00	5.00	17.00	17.00						
11													
12													
13													
14													

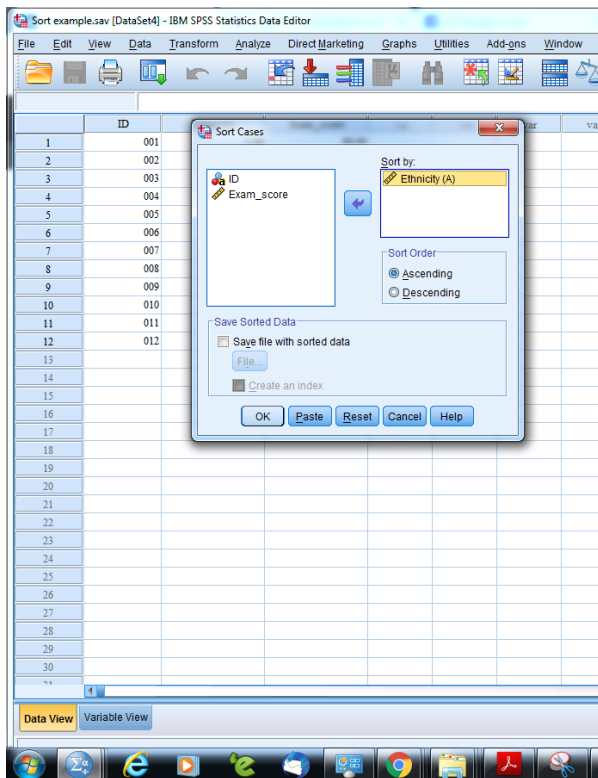
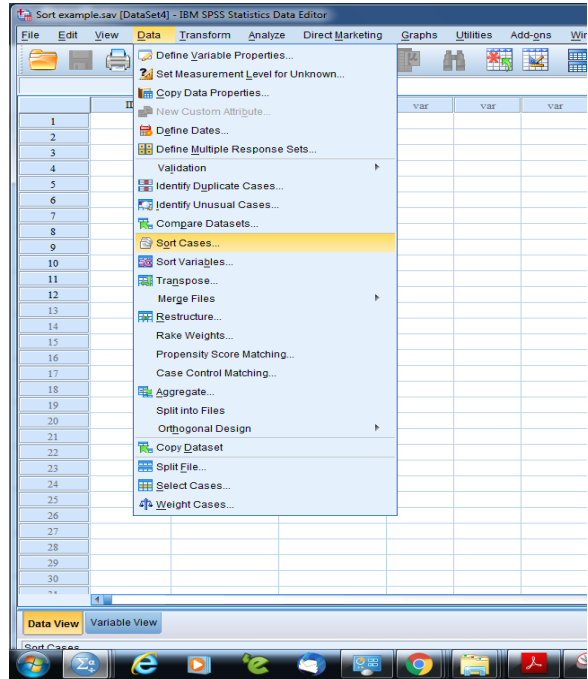
SORT ONE OR MORE VARIABLES

Path

Data – Sort Cases

Sort example.sav [DataSet4] - IBM SPSS Statistics Data Editor

	ID	Ethnicity	Exam_score	var	var	var
1	001	1.00	80.00			
2	002	2.00	90.00			
3	003	4.00	77.00			
4	004	3.00	79.00			
5	005	2.00	78.00			
6	006	1.00	80.00			
7	007	3.00	89.00			
8	008	4.00	79.00			
9	009	2.00	81.00			
10	010	1.00	91.00			
11	011	4.00	92.00			
12	012	3.00	82.00			



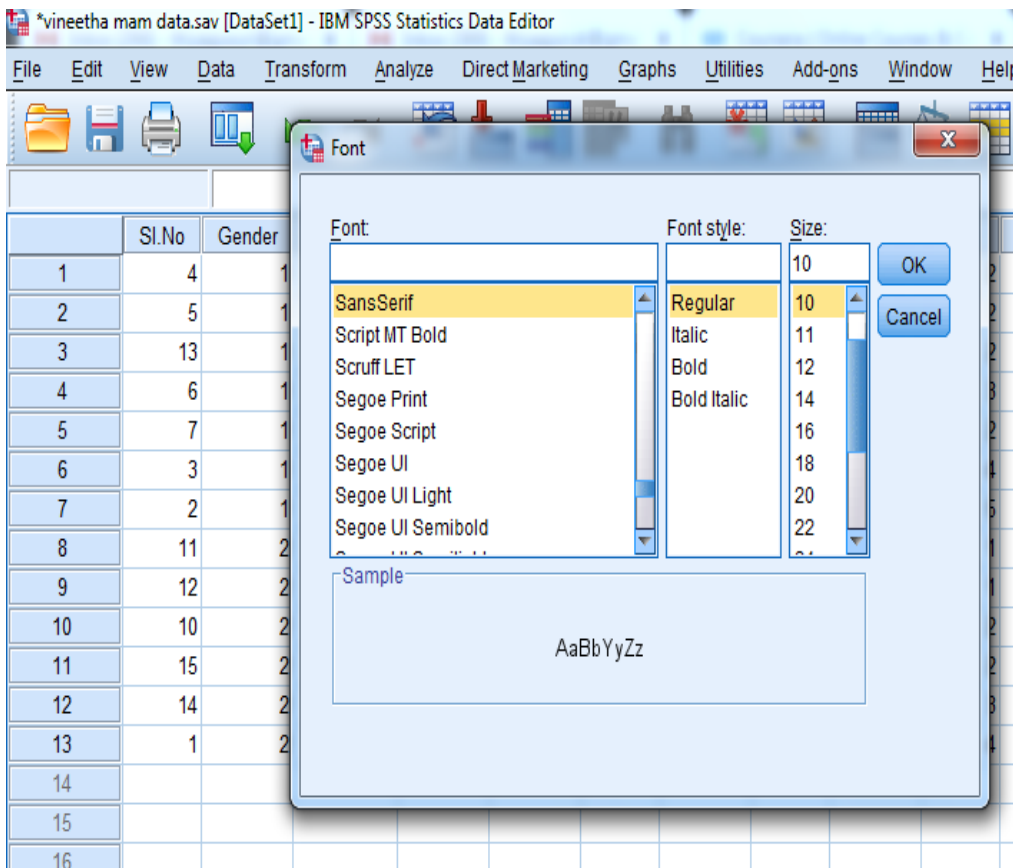
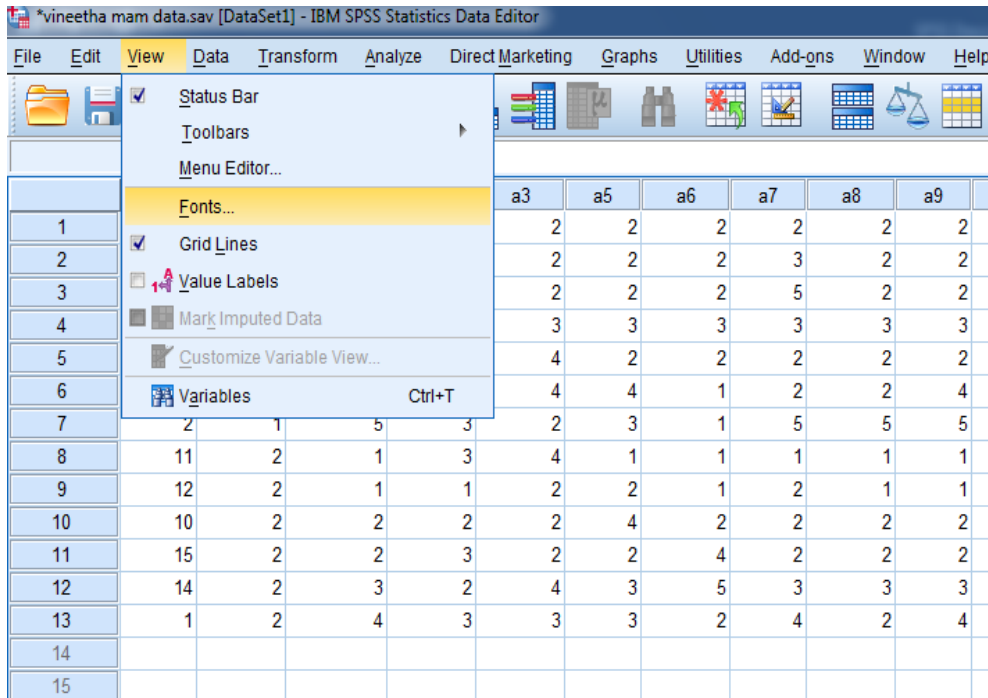
Sort example.sav [DataSet4] - IBM SPSS Statistics Data Editor

	ID	Ethnicity	Exam_score	var	var	var
1	001	1.00	80.00			
2	006	1.00	80.00			
3	010	1.00	91.00			
4	002	2.00	90.00			
5	005	2.00	78.00			
6	009	2.00	81.00			
7	004	3.00	79.00			
8	007	3.00	89.00			
9	012	3.00	82.00			
10	003	4.00	77.00			
11	008	4.00	79.00			
12	011	4.00	92.00			

FONT CUSTOMISATION

Path

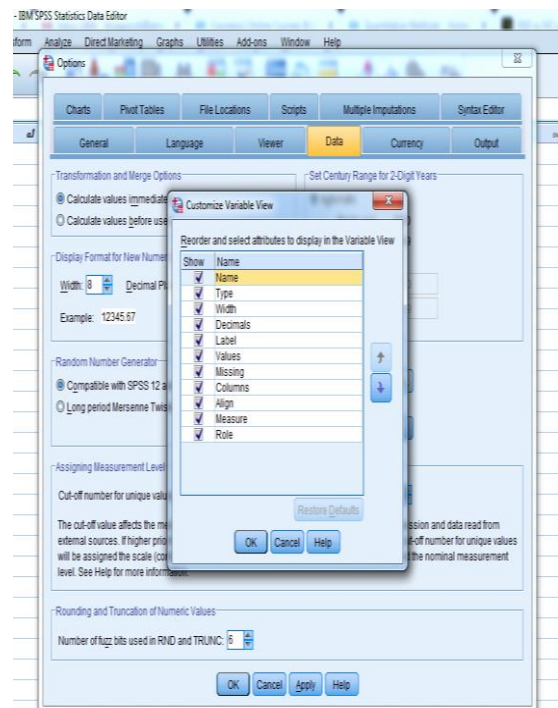
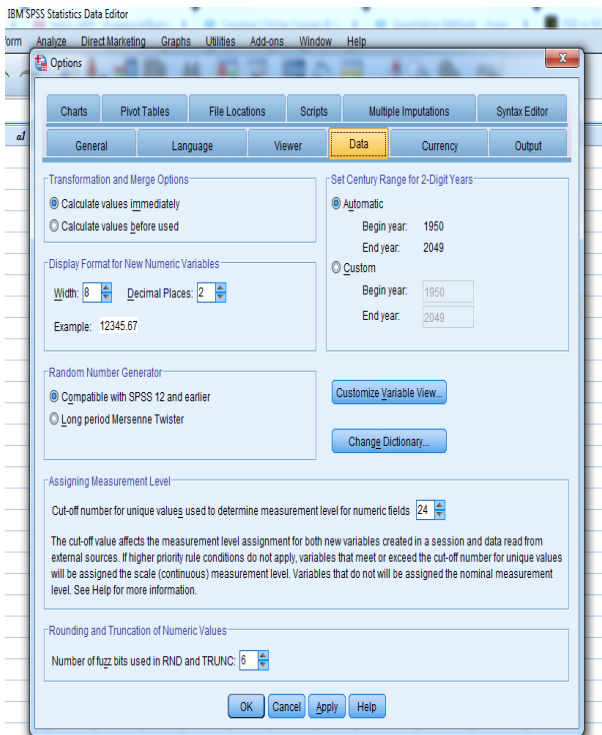
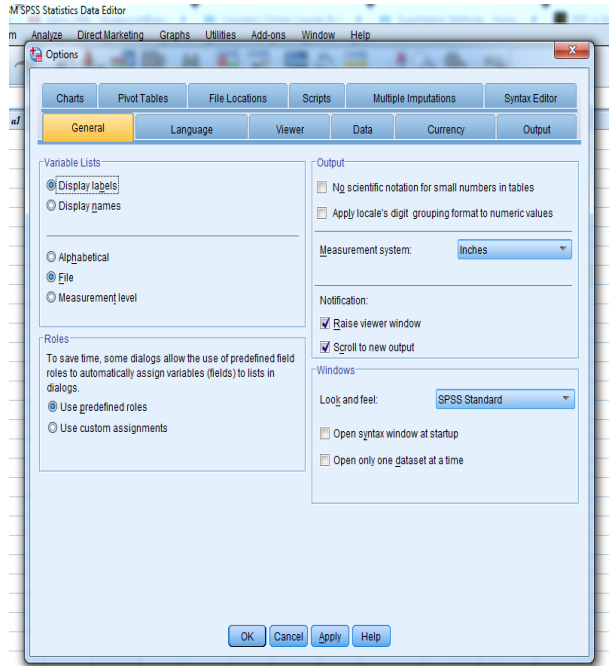
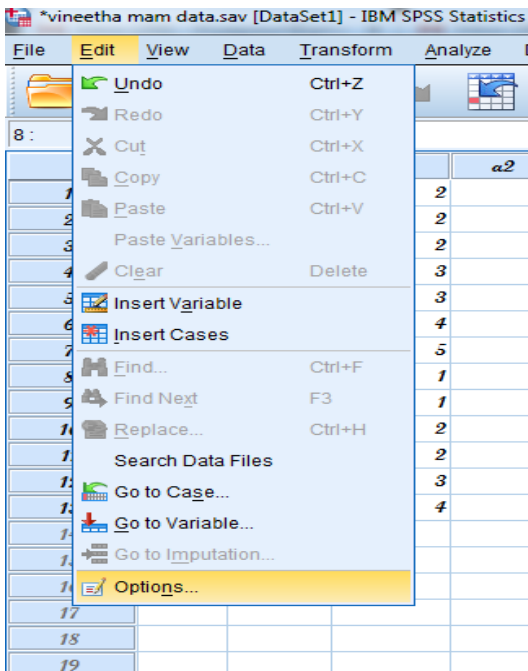
View - Fonts



CUSTOMISED DISPLAY VARIABLE VIEW

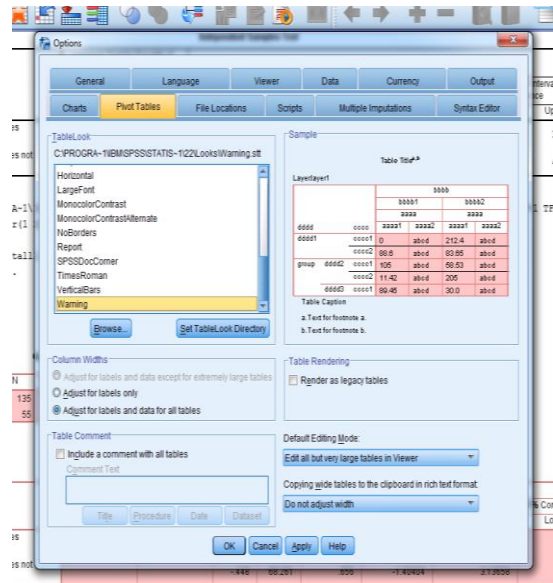
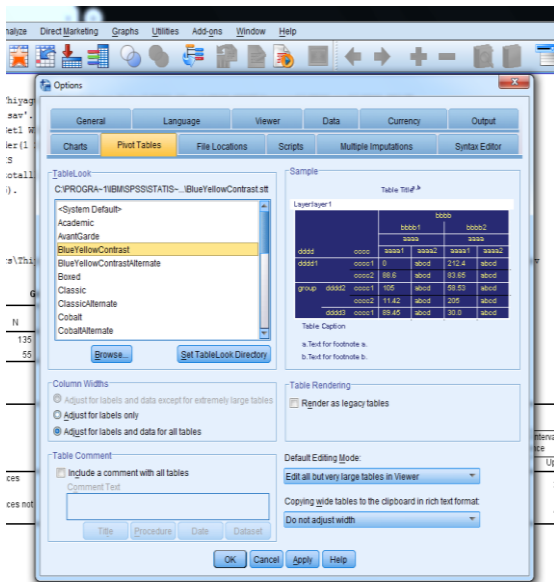
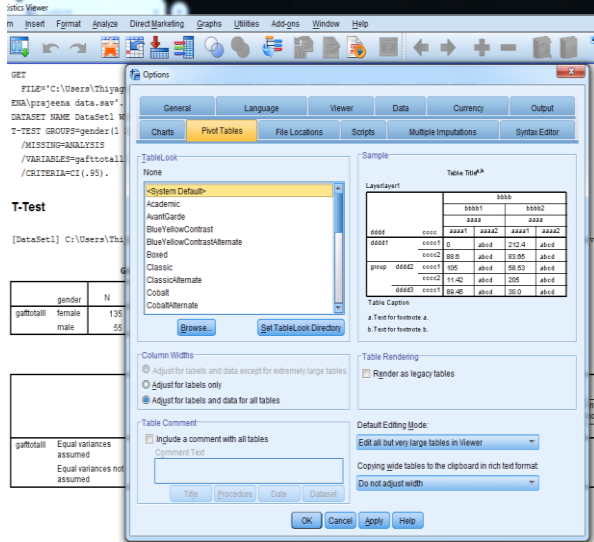
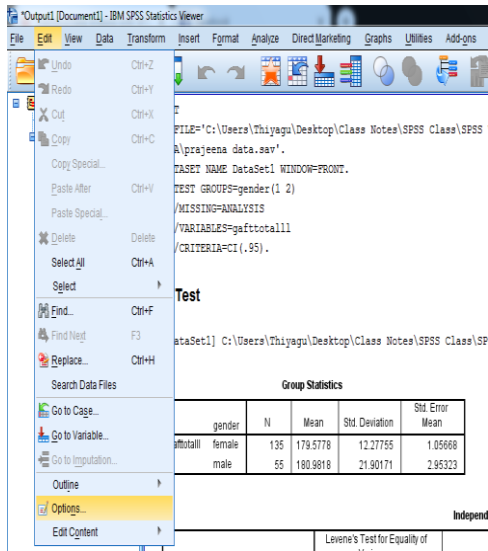
Path

Edit – Options – Data



CUSTOMISE OUTPUT FORMAT

How to edit SPSS Tables (Edit – Option –Pivot Tables)



T-Test

	gender	N	Mean	Std. Deviation	Std. Error Mean
gattotall	female	135	179.5778	12.27755	1.05668
	male	55	180.9818	21.90171	2.95323

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
gattotall	Equal variances assumed	21.604	.000	-.560	188	.576	-1.40404	2.50501	-6.34558	3.53750
	Equal variances not assumed			-.448	68.261	.656	-1.40404	3.13658	-7.66255	4.85447

OTHER BASICS IN SPSS

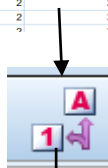
1. Case Summary:

Path

Analyse --- Report ---- Case Summaries

2. Creating Value Labels

	SI No	Gender	Age	MaritalStatus	Subject	Typeofinstitution	Localityofinstitution	Localityofhome	Familytype	FathersEducation
1	1	2	2	3	3	3	1	1	2	1
2	2	1	1	1	3	3	1	1	2	2
3	3	1	2	3	1	3	1	2	2	2
4	4	1	2	1	1	3	1	1	2	2
5	5	1	1	1	1	3	1	1	1	2
6	6	1	2	3	1	3	1	1	2	2
7	7	1	2	3	3	3	1	1	1	2
8	8	1	2	3	1	2	2	2	2	2
9	9	1	2	3	2	3	1	1	2	2
10	10	1	2	3	2	3	1	1	2	2
11	11	1	2	3	2	3	1	1	2	2
12	12	1	1	1	2	3	2	1	1	2
13	13	1	1	1	3	3	2	1	2	2
14	14	1	1	1	2	3	2	1	1	1
15	15	1	2	3	2	3	2	1	2	2
16	16	1	1	1	2	3	2	2	2	2



	SI.No	Gender	Age	MaritalStatus	Subject	Typeofinstitution	Localityofinstitution	Localityofhome	Familytype	FathersEducation
1	1	female	2	3	3	3	3	1	1	1
2	2	male	1	1	3	3	3	1	1	1
3	3	male	2	3	1	3	3	1	1	2
4	4	male	2	1	1	3	3	1	1	1
5	5	male	1	1	1	3	3	1	1	1
6	6	male	2	3	1	3	3	1	1	1
7	7	male	2	3	3	3	3	1	1	1
8	8	male	2	3	1	2	2	2	2	2
9	9	male	2	3	2	3	3	1	1	1
10	10	male	2	3	2	3	3	1	1	1
11	11	male	2	3	2	3	3	1	1	1
12	12	male	1	1	2	3	3	2	2	1
13	13	male	1	1	3	3	3	2	2	1
14	14	male	1	1	2	3	3	2	2	1
15	15	male	2	3	2	3	3	2	2	1

INSERTING, DELETING AND MOVING THE VARIABLE (COLUMN)

Insert

	a2	a3	a5	a6	a7	a8	a9	var	var
1	0	1	0	1	0	0	0	0	1
2	0	0	0	0	0	0	0	1	1
3	0	0	0	0	0	1	1	1	1
4	0	0	0	1	0	1	1	1	1
5	0	0	0	0	0	0	1	0	0
6	0	0	0	1	0	0	1	1	1
7	0	0	0	1	0	0	1	1	1
8	0	0	0	1	0	0	1	1	1
9	0	0	0	1	0	0	1	1	1
10	0	0	0	1	0	0	1	1	1
11	0	0	0	1	0	0	1	1	1
12	0	0	0	1	0	0	1	1	1
13	0	0	0	1	0	0	1	1	1
14	0	0	0	1	0	0	1	1	1
15	0	0	0	1	0	0	1	1	1
16	0	0	0	1	0	0	1	1	1
17	0	1	1	1	0	1	1	0	0

	SI.No	Gender	a1	a2	a3	a5	a6	a7	a8	a9	var
1	1	female	0	1	0	1	0	0	0	0	1
2	2	male	0	0	0	0	0	0	0	1	1
3	3	male	0	0	0	1	0	0	1	1	1
4	4	male	0	0	0	0	0	0	0	1	0
5	5	male	0	1	0	1	0	0	0	1	1
6	6	male	0	0	0	1	0	0	0	1	1
7	7	male	0	0	0	1	0	1	0	0	1
8	8	male	0	0	0	1	0	0	0	1	1
9	9	male	0	0	0	1	0	0	0	1	1
10	10	male	0	1	0	1	0	0	0	1	1
11	11	male	0	0	0	1	0	0	0	1	1
12	12	male	0	0	0	1	0	0	0	1	1
13	13	male	0	0	0	0	0	0	0	1	1
14	14	male	0	0	0	0	0	0	0	1	1

Deleting (Clear)

The screenshot shows the IBM SPSS Statistics Data Editor interface. The 'Edit' menu is open, and the 'Clear' option is highlighted. The data grid shows columns labeled a2 through a9 and several 'var' columns. Row 17 is highlighted, and the 'Clear' option is being applied to the selected cells.

Moving (Cut – Paste)

The screenshot shows the IBM SPSS Statistics Data Editor interface. The 'Edit' menu is open, and the 'Cut' option is highlighted. The data grid shows columns labeled a2 through a9 and several 'var' columns. Row 17 is highlighted, and the 'Cut' option is being applied to the selected cells.

INSERT CASES (Row)

Insert

The screenshot shows the IBM SPSS Statistics Data Editor interface. The 'Edit' menu is open, and the 'Insert Cases' option is highlighted. The data grid shows columns labeled SI.No, Gender, a1 through a9, and 'var'. Row 10 is highlighted, and the 'Insert Cases' option is being applied to the selected row.

The screenshot shows the IBM SPSS Statistics Data Editor interface. The 'Edit' menu is open, and the 'Insert Cases' option is highlighted. The data grid shows columns labeled SI.No, Gender, a1 through a9, and 'var'. Row 10 is highlighted, and the 'Insert Cases' option is being applied to the selected row.

SORTING VARIABLES

The screenshot shows the IBM SPSS Statistics Data Editor interface. The 'Data' menu is open, and 'Sort Cases...' is selected. The data grid shows columns 'SI.No', 'a5', 'a6', 'a7', 'a8', and 'a9' with numerical values for rows 1 through 25.

The screenshot shows the 'Sort Cases' dialog box open over the data grid. The 'Sort by' list contains 'SI.No [SI.No]', 'Gender (A)', and 'a1 (A)'. 'Gender (A)' is selected. The 'Sort Order' is set to 'Ascending'. The 'Save Sorted Data' section has 'Save file with sorted data' checked. The data grid shows columns 'SI.No', 'Gender', 'a1', and 'a2'.

The screenshot shows the final sorted data grid in the IBM SPSS Statistics Data Editor. The data is sorted by the 'Gender' variable in ascending order. The grid includes columns 'SI.No', 'Gender', 'a1', 'a2', 'a3', 'a5', 'a6', 'a7', 'a8', 'a9', and several 'var' columns. The 'Visible: 10 of 10 Variables' indicator is present in the top right corner.

SI.No	Gender	a1	a2	a3	a5	a6	a7	a8	a9	var	var	var	var	var	var	var	var	var	var
1	4	1	2	2	2	2	2	2	2										
2	5	1	2	2	2	2	2	3	2										
3	13	1	2	3	2	2	2	5	2										
4	6	1	3	3	3	3	3	3	3										
5	7	1	3	2	4	2	2	2	2										
6	3	1	4	3	4	4	1	2	2										
7	2	1	5	3	2	3	1	5	5										
8	11	2	1	3	4	1	1	1	1										
9	12	2	1	1	2	2	1	2	1										
10	10	2	2	2	2	4	2	2	2										
11	15	2	2	3	2	2	4	2	2										
12	14	2	3	2	4	3	5	3	3										
13	1	2	4	3	3	3	2	4	2										
14																			
15																			
16																			
17																			
18																			
19																			