ccc

**Fondren Library**

Data @ Rice Workshop Series

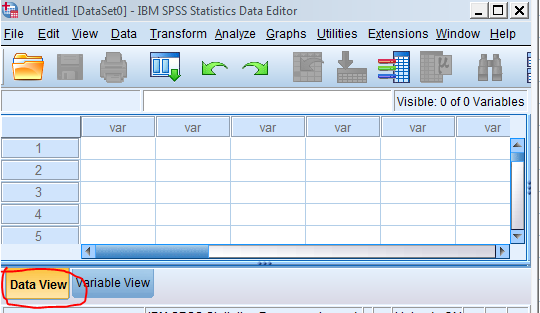
**Introduction to SPSS**

Overview:

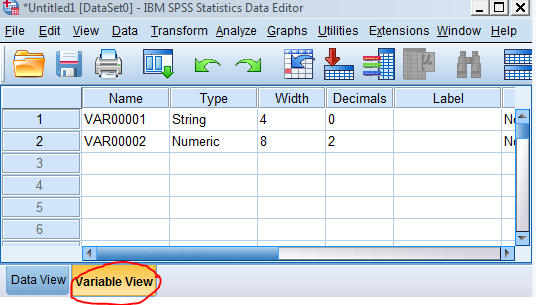
The software name originally stood for **Statistical Package for the Social Sciences** (**SPSS**)

Interface

Data View



Variable View

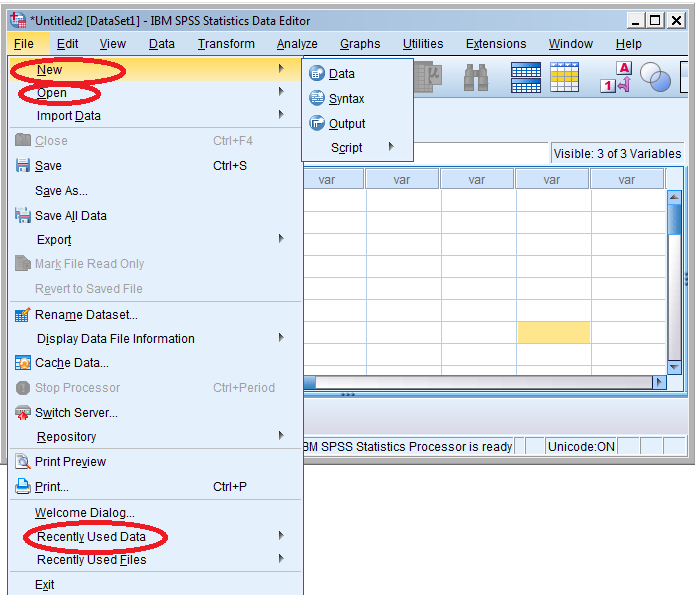


Data entry and change variable properties(name, type, lable, values, measures)

Useful options under the Menus

**File**

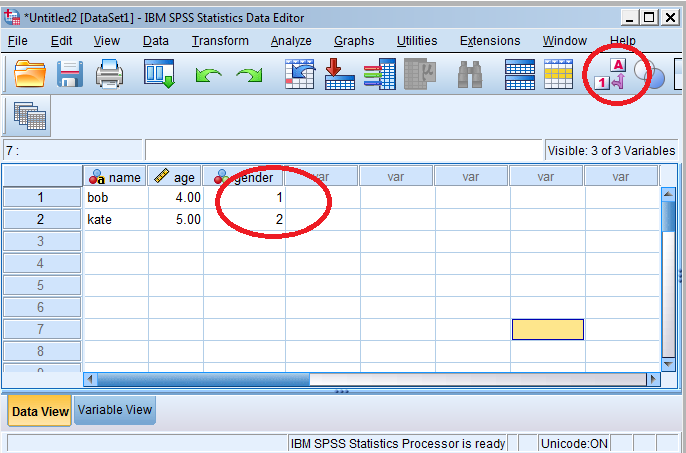
* New
* Open
* Recently used

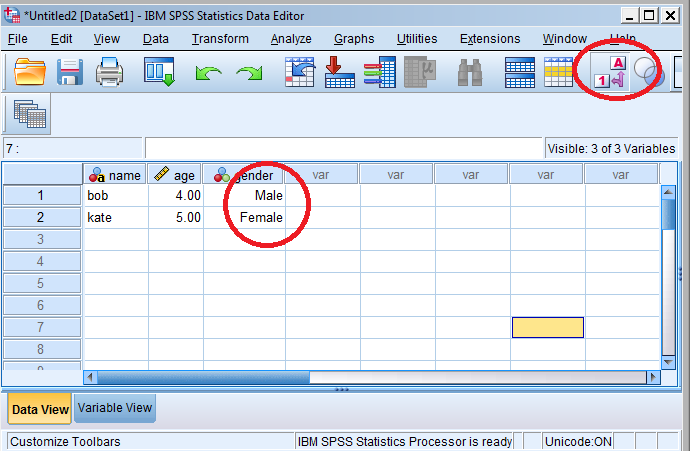


**View**

* Value lables

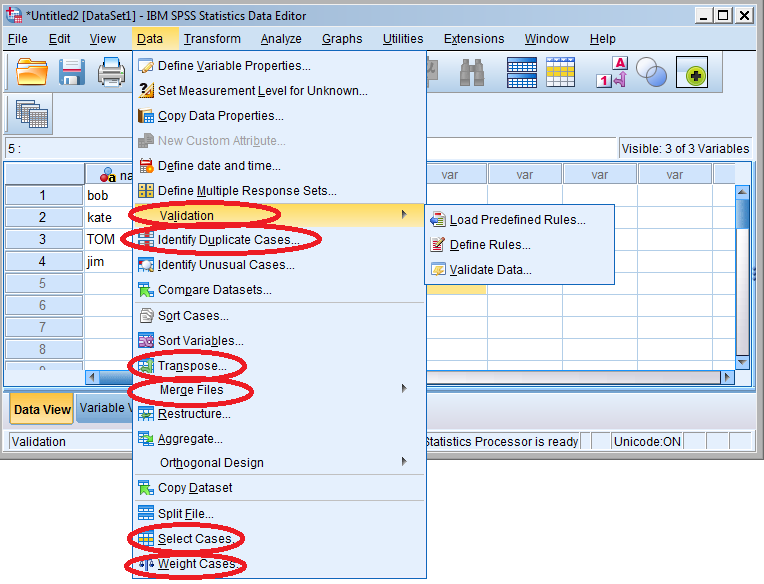
When it’s off, it shows the numaric values. When it’s on, it shows the text values imput in the Variable View





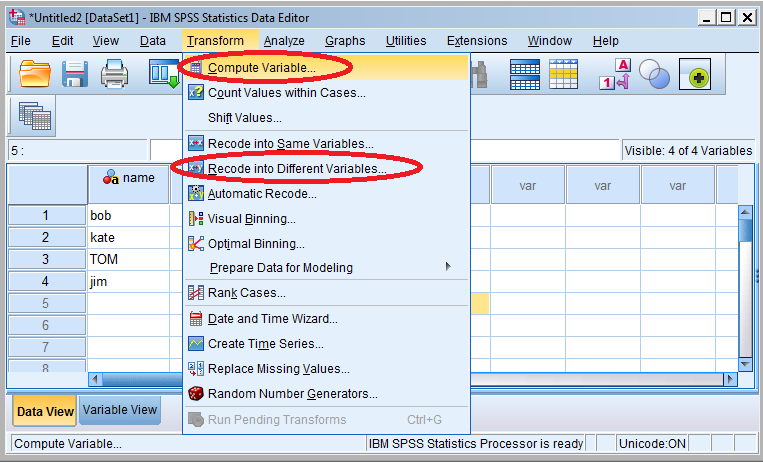
**Data**

* Identify duplicated case
* Transpose
* Merge files
* Select cases
* Weight cases



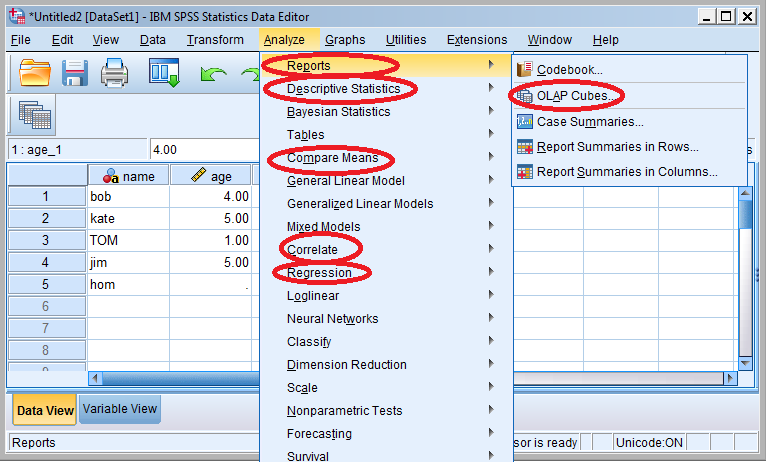
**Transformation**

* Compute variable
* Recode into different variable



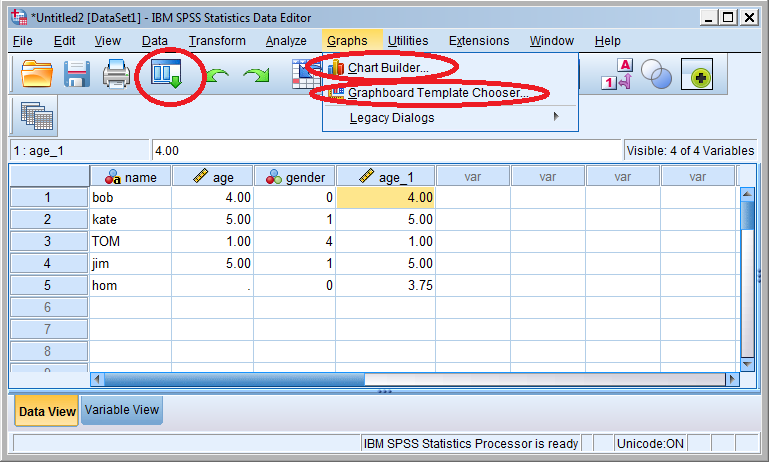
**Analyze**

* Report-OLAP Cubes
* Descriptive Statistics
* Compare Means
* Correlate
* Regression



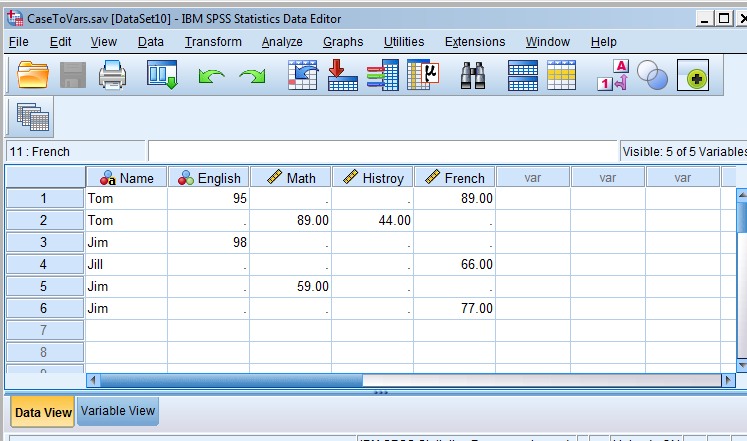
**Graphs**

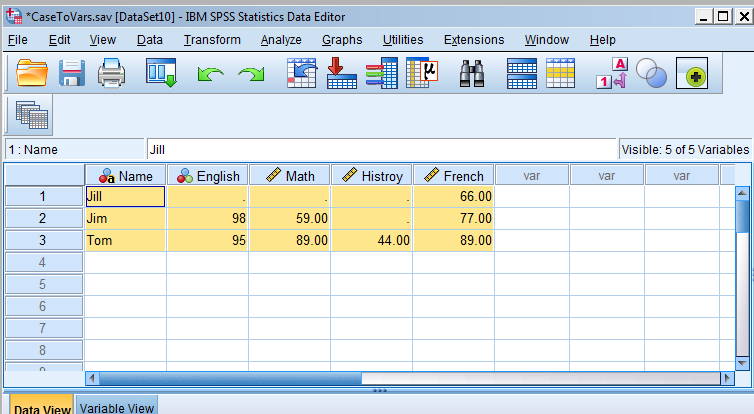
* Chart Builder
* Graphboard Template Chooser



Recently used and Customize

Scrips



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Terms

**Data type**

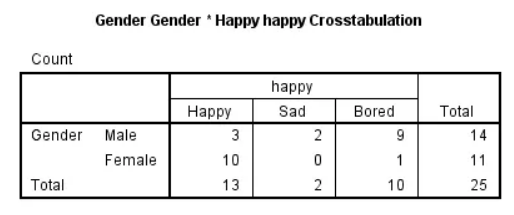
* String
* Numeric

**Level of measures**

* Norminal (No ranking, "Race", "Gender")
* Ordinal (Scale, "Strongly Disagree","Strongly Agree")
* Scale ("Age", "Height", "Income")

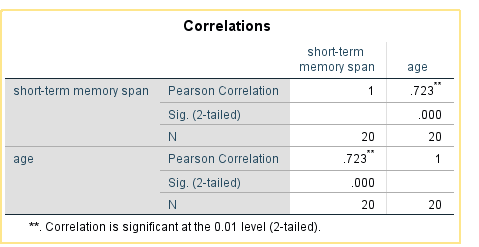
**Cross Tablulation**

Cross-tabluations are frequency distributitons for two variables together. It gives you a basic picture of how two variables inter-relate.

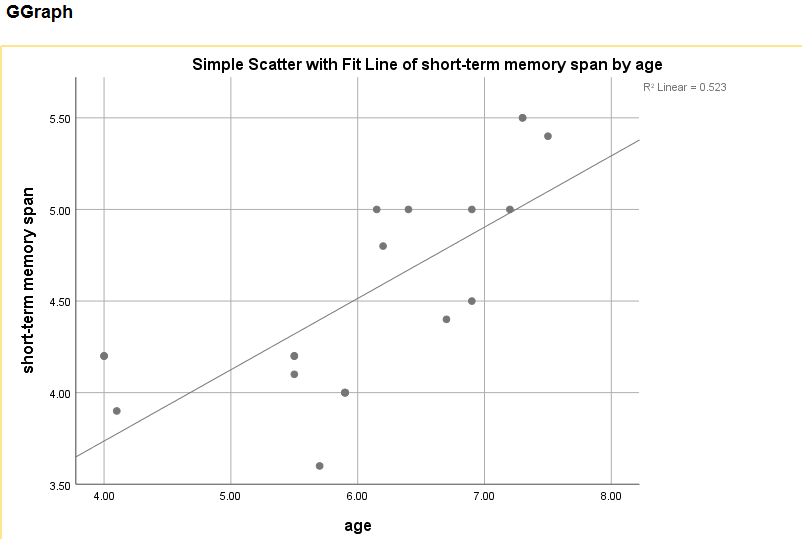


**Chi square** is used to test the relationship between two norminal or ordinal variables. (If **p-value** is less than **0.05**)

**Correlation** measures the strength and direction (-1,1) of association between two quantitative variables.



**Regression** predicts the value one variable(dependent) base on another variable(independent, predictor)



**Y=2.2+0.39X**

Exercise

1. **Find out how many girls vs boys in our dataset**
2. **Make a pie chart for gender distribution**
3. **What’s the average age of the children?**
4. **Recode “Age” into “Age1”(below or equal 6 code as 1, above code as 2)**

**Recode “Read Ability” into “ReadAbility1” (below or equal to 6 code as 1, above code as 2)**

1. **Crosstab between “Age1” and “ReadAbility1”**
2. **Correlation between “Age” and “Memory Span”**
3. **Linear Regression “Age” and “Memory Span”**
4. **Plot “Age” and “Memory Span” with a trend line**
5. **OLAP Cubes Average Grad in 6 years for Black/White weighted by Cohort counts**