Introduction to Probability, Statistics and Data Handling	statgraphics 19°
AGH UST ESA LAB 3	Regression, ANOVA

1. Copy **Regression** <u>data</u> from my web page contains two colums: SAT and GPA (adapted from <u>365DataScience</u>):

SAT GPA 1714 2,40 1664 2,52 1760 2,54 1685 2,74 1693 2,83 ...

Their total SAT scores include critical reading, mathematics, and writing. Whereas, the GPA is their Grade Point Average they had at graduation.

- a) create a linear regression which predicts the GPA of a student based on their SAT score.
- b) find the correlation coefficient.
- c) in report describe what is the method of regression and how the parameters are obtained
- 2. Comparison of two samples: copy data TwoSamples and follow the instruction <u>here</u>. In the report describe the statistics used for the decision.
- 3. Analysis of variance (ANOVA) Instruction is <a href="here">here</a>. Data can be found directly in Statgraphics: File->Open->Open StatFolio-> oneway.sgp