

# Assignment 1

Datasets were switched, so 2nd dataset contains data needed for 1 Assignment.

**For each target label  $y_i$  (using bootstrap) estimate mean, median and find an error of your Estimation.**

From theory we know that standard deviation of statistic calculated on bootstrapped samples, so first of all I create 1000 samples using bootstrap technique, calculate statistic on each one of them (mean and median), and after that calculated mean and std on those statistics.

**For each target label  $y_i$  estimate a linear model for better prediction of  $y_i$   
. Then (using bootstrap)  
find the 95%-confidence intervals for each coefficient of each model including an intercept.**

I created 1000 samples, on each one of them fitted linear regression, and get array of coefficients and intercepts, and after that calculated confidence interval.