

HOMEWORK #1

Read:

Chapter 1 in 'Regression Analysis by Example'.
Review your old intro stat textbook.

R Assignment:

For each of the four problems hand-in the relevant R code and use the output to answer all questions.

1. Do the guided example at the end of the first R tutorial. Hand in the graphs from part (d) and the answers to part (e).
2. Create a data frame in R consisting of the following data set.

Name	Homework	Midterm	Final
Frank	97	95	92
Emily	93	92	96
William	95	90	88
Janet	88	83	75
Betty	86	79	84
Joe	85	82	86
Bob	72	63	72

3. Use R to create a new variable *Total* which is the weighted average of the midterm and final (the homework counts for 30% of the total score, the midterm 25% and the final 45%). Add the variable to the data frame created in Question 2.
4. Use R to compute the mean and standard deviation of the variables Homework, Midterm, Final and Total.
5. Use R to make a scatterplot of the midterm scores against final scores. Also compute the correlation between the two variables.