

STAT 345-01: Nonparametric Statistics

Problem Set 6

Assigned 2018 October 16

Due 2018 October 23

Show your work on all problems! Be sure to give credit to any collaborators, or outside sources used in solving the problems. Note that if using an outside source to do a calculation, you should use it as a reference for the method, and actually carry out the calculation yourself; it's not sufficient to quote the results of a calculation contained in an outside source.

Please hand in parts one and two separately.

1 Part One

1.1 Conover Problems on The Squared-Ranks Test

Exercise 5.3.2

Exercise 5.3.4

Problem 5.3.1

1.2 Conover Problems on Rank Correlations

Exercise 5.4.2

Exercise 5.4.4 [Look up the data for Gerald Ford and Ronald Reagan and include them in the data from the book]

2 Part Two

Download the ipython/jupyter notebook

http://ccrg.rit.edu/~whelan/courses/2018_3fa_STAT_345/data/ps06.ipynb

using the username and password given in class, and carry out the exercises, evaluating the cells and adding commands as necessary to complete the problem according to the instructions. Submit your completed notebook as a hardcopy, or via email (either the final .ipynb file or a pdf, which can be created using nbconvert).

3 Extra Credit – Due 2018 October 25

Problem 5.4.5 [You do not need to consider the R statistic from Problem 5.4.4.]