

STAT 40001/MA 59800 Statistical Computing/ Computational Statistics Fall 201.
Homework 2

Due : September 17, 2013

Name:

PUID:

Instruction: Please submit your R code along with a brief write-up of the solutions (do not submit raw output). Some of the questions below can be answered with very little or no programming. However, write code that outputs the final answer and does not require any additional paper calculations.

Q.N. 1) Table 1 and Table 2 below are the test scores of 10 students in Test 1 and Test 2

Name	Test 1
Ana	56
Brian	78
Cathy	87
Dough	89
John	95
Lucas	98
Marcus	59
Nabin	78
William	87
Zoe	98

Table 1: Test 1 Scores

Name	Test2
Ana	86
Brian	67
Cathy	78
Dough	89
John	87
Lucas	67
Marcus	94
Nabin	78
William	81
Zoe	83

Table 2: test 2 scores

- a) Use ***merge(.,.)*** to create a single table containing the student's test 1 and test 2 scores.
- b) How many students did better in the second test?

Q.N. 2) The data frame ***Calculus*** from the ***PASWR*** package has the Mathematical assessment score for 36 students enrolled in a biostatistics course according to whether or not the students had successfully completed a calculus course prior to enrolling in the biostatistics course.

- a) Attach the dataframe **Calculus** and print the data set.
- b) Calculate the average score of the students who didn't complete Calculus course.
- c) Calculate the average score of the students who completed the Calculus course.

Q.N. 3) Access the data from url

http : //www.stat.berkeley.edu/users/statlabs/data/babies.data

and store the information in an object named **BABIES** using the function *read.table()*.

- a) How many variables are included in the study?
- b) Print first 10 lines of the data set.
- c) Print last 10 lines of the data set.

Q.N. 4) The data frame **Rat** from the **PASWR** package has the survival time in weeks of 20 male rats exposed to high levels of radiation. Draw a histogram of the survival times of the rats.

Q.N. 5) Consider the following data regarding the average spending on health care per person for various countries published in scholastic update in 2001.

Country	Amount (\$)
United Kingdom	1992
Czech Republic	1106
Italy	2212
Germany	2808
France	2561
Canada	2792
U.S.	4887

Construct a bar graph to display the information..