

CSCI 3900C Lab #1 (25 points)

Reminder: This assignment uses data sets in the base R installation. You can get more information about these data sets with the help command (or ?).

Write an R script to accomplish the following tasks. Please put all code in a single script file, and use comments to identify the different sections. Also use comments for your name at the top.

UPLOAD YOUR SCRIPT TO THE LAB1 D2L Dropbox.

- A. Load the “Titanic” data set (this step should be part of your script).
Then write the code necessary to find the following information in the data set. Make sure your code echoes each result to the console.
 1. How many first class female children survived?
 2. How many third class passengers survived?
 3. Among all 4 classes of passenger, how many survived and how many did not? (This result should be presented as a table.)
 4. How many total passengers are reported in this data set?
 5. Report the composition of passengers by gender (a one-row table).
 6. How many of each gender survived?
 7. What *percentage* of each gender survived?

- B. Load the “USArrests” data set (this step should be part of your script).
Then write the code necessary to find the following information in the data set. Make sure your code echoes each result to the console. In 1973...
 1. How many arrests for murder occurred per 100,000 people in Oregon?
 2. What is the total number of arrests (per 100,000 people) reported in this data for Vermont?
 3. What is the average number of arrests (per 100,000 people) for assault across all 50 states?
 4. What is the total number of arrests (per 100,000 people) for assault OR rape in Georgia?
 5. Add a total column to the data set that represents the total arrests reported for each state. Display the total for each state.