Skill Check 1

Agreement

This Skill Check is an individual assessment and you should not receive or offer help on it from any other human. However, you may use any resource, either online or physical, to complete the work. This includes:

- Any help forum or website (e.g. StackOverflow) questions that already exist. (You MAY NOT ask a question on a forum and then receive specific help from a person.)
- Any notes, code, slides, papers, or previous feedback from the instructor.
- Any books, online or physical.
- Scholarly works such as papers.

It DOES NOT include:

- Help from any other student or person. This is an individual assessment.
- Asking for help on specific questions.
- Help from homework websites such as Course Hero or Chegg.

Instructions

Write a R script that provides answers to the following questions. If any questions need direct answers, give them in a comment. Turn in your R script at the end of the period. You will have an opportunity to continue to improve your answers after receiving initial feedback.

Skill Check Questions

a. Create an object that is a matrix that is 101 rows and 203 columns with elements consisting of random numbers pulled from a distribution 0 to 100. Verify your new object is a matrix using an "is" function.

b. Write a line of code that will pull up the help documentation for the function `bindenv`.

c. What class is the data set `OrchardSprays`?

d. Load the data set `Harman23.cor` and convert the member `cov` into a data frame. Do the same with `Harman74.cor`.

e. Load the data set `Indometh` and use it to complete the following tasks.

   e.1. Create three data-frame objects: one that contains all the data for Subjects 1 and 2, all the data for Subjects 3 and 4, and all the data for Subjects 5 and 6.

   e.2. Print out the `conc` for each subject at time 8.00. Which subject had the lowest concentration of Indometh at time 8.00?

   e.3. Create a new object `Indometh2` that stores each subject's data as a member of a list.

f. Load the `quakes` data set and use it to answer the following:

   f.1. Convert the `stations` column into an unordered factor. How many stations are in `quakes`?

   f.2. Create a new vector object from each of the columns in `quakes`.

   f.3. Create a list from the objects you created in f.2. Make sure each member has a name.

g. Include a screenshot to prove that this script is saved in your CPSC folder with your other class work.