Assignment 4 Solution

Quiz: Week 4

Question 1: The following code will provide the bar plot of a numeric time series x.

(a) **barplot(x, ylab="Value", xlab="Date"). Hint: This will construct the relevant bar plot with proper axis names.**
(b) plot(x, ylab="Value", xlab="Date"). Hint: This will plot a simple line plot of object 'x' over time.
(c) bar(x, ylab="Value", xlab="Date"). Hint: This will result in an error.
(d) barplot(x, y, ylab="Value", xlab="Date"). Hint: This will result in an error as barplot is only appropriate in plotting univariate series.

Question 2: The following code will provide the density distribution of a numeric variable x.

(a) plot(x). Hint: This will simply plot the observations in the vector.
(b) hist(x). Hint: This will plot the frequency distribution of variable x.
(c) **hist(x, prob= T). Hint: This will plot the density distribution of x.**
(d) barplot(x). Hint: This will plot the barplot x.

Question 3: While of the following command is used to attach or load the package in R?

(a) attach () Hint: Allows access to objects of the data frame

(b) **library() Hint: packages are stored in the library**

(c) install.package() Hint: the package is a collection of R functions, data, and compiled code

(d) detach() Hint: detach removes a database or object library/package from the search path

Question 4: Point out the correct statement.

(a) **c() function is used to combine elements in the vector. Hint: v<- c(1,2)**

(b) The hash ## symbol is used to assign value to variable Hint: a<-5

(c) NA shows undefined values in R. Hint: NA stands for not available

(d) The NaN represents missing values in the dataset. Hint: a = 5/0

Question 5: Point out the correct statement about the c() function:

(a) To extract rows (Hint: [c,] to extract the rows)

(b) To extract columns (Hint: [,c] to extract the columns)

(c) **To combine elements (Hint: a= c(1,2,5,7))**

(d) To extract the rows and columns (Hint: [a,b] to extract rows and columns)

Question 6: Which of the following statements is correct?

a. **"<-" is used to assign the value (Hint: a<-5)**

b. “=” is always for testing equality (Hint: 4=5)

c. “!!=” Is “not-equal-to operator” (Hint: 6!!=8)

d. “<” is used for” less than or equal to”. (Hint: 4<7)

Question **7:** Which of the following sequence is used to load the in-built data (taking the example of gala. data) and view the data in R?

a. install.packages(“galah”), data(“gala”). Hint: there is a need to load the package in the R.

b. install.packages(“galah”), library(galah), data(“gala”). Hint: view command is used to view the dataset.

c. library(galah), data(“gala”), view(gala). Hint: there is a need to install the package in the R.

d. install.packages(“galah”), library(galah), data(“gala”), view(gala). Hint: after installing and loading the required package, one can load the data and view it.

Question **8:** In R studio, scripts will run on:

a) **script editor Hint: code is not executed until we run and send it to the console.**

b) console Hint: evaluation of code takes place in the console.

c) Environment Hint: The environment tab provides meta-project information such as what values you have stored in variables.

d) Plot Hint: Plots tab displays any plots, graphs, or charts.

Question 9: Which of the following statement is incorrect?

a) **4^2+5-3 will give the output of 10 Hint: * stands for multiplication**.

b) 4^2+5-3 will give the output of 18 Hint: it will follow the BODMAS rule.

c) 5+3 will give output of 8 Hint: + stands for addition.

d) 5-3 will give the output of 2 Hint: - stands for subtraction.

Question 10: Which of the following codes is used to extract/check the first few observations from the dataset?

a) tail() Hint: it is used to read the last n rows of the dataset.

b) **head() Hint: tail function is opposite to that of the head function.**

c) view() Hint: it is used to view the dataset.

d) summary() Hint: it will give basic statistical measures of each variable.