R and RStudio Basics - Quiz

Solutions

Question 1

Is RStudio essential to run R code?

    a. Yes
    b. No
    c. No, but it does make it easier

SOLUTION: c.

Question 2

What is RStudio?

    a. A package
    b. A integrated development environment for R
    c. A type of coding language
    d. A type of command

SOLUTION: b.

Question 3

Where in RStudio would you find error messages?

    a. The script editor
    b. The "Environment" tab
    c. The Console
    d. The "History" tab
    e. The "Plots" tab

SOLUTION: c.

Question 4

How do you open a new R Script?

    a. File > New file > R Script
    b. File > New file > R Notebook
    c. File > New project
    d. File > Open file

SOLUTION: a.

Question 5

The following R code is supposed to create a numeric vector but there is something wrong with it:
age <- (16,21,18,19)

What would this code look like if the problem was corrected?

a. *Age <- (16,21,18,19)*
b. *age >- (16,21,18,19)*
c. *age <- c(16,21,18,19)*
d. *age <- (16,21,18,19,)*

SOLUTION: c.

Question 6

What does the argument *header=TRUE* do?

SOLUTION: It tells R to not include the first row in a file as observations in the data set but rather as the variable names for each column.

Question 7

The *sep=""* command tells R how to separate data in a file. What symbol is used with this command for most CSV files?

a. /
b. t/
c. $
d. ,

SOLUTION: d.

Question 8

What does the *names()* command do?

SOLUTION: It provides you with the names of each of the variables in a given data set.

Question 9

What does placing "#" at the start of a line of code do?

SOLUTION: It tells R to treat that section of code as a comment. This is signified by it turning green.

Question 10

What information about a data set appears in the environment when it is inputted into R?

SOLUTION: The name of the data set, as well as the number of observations and the number of variables in it.

Question 11

What is the correct way to name an object in R? Select the line of code for opening a file in R and naming it **mydata**.

   a. *mydata <- read.table(file.choose(), sep=",", header=TRUE)*
   b. *"mydata"<- read.table(file.choose(), sep=",", header=TRUE)*
   c. *mydata >- read.table(file.choose(), sep=",", header=TRUE)*
   d. *read.table(file.choose(), sep=",", header=TRUE, name="mydata")*

SOLUTION: a.

Question 12

The following code is attempting to create a character vector called **names** with four elements:
names <- c(John,Mary,Paul,Jane)

What is missing from this code?

SOLUTION: The use of "" around each individual name.
The correct code should be *names <- c("John","Mary","Paul","Jane")*

Question 13

What does the *attach()* command do?

SOLUTION: It attaches the data set to the R search path. This meeans that whenever you are working with a variable in the data set you do not have to state the name of the data set.

Question 14

What is a package in R?

   a. A collection of lines of code ran all at once
   b. A type of command
   c. A collection of R functions, data and compiled code

SOLUTION: c.

Question 15

How do you install packages using R code?

   a. *Install()*
   b. *packages()*
   c. *download()*
   d. *install.packages()*

SOLUTION: d.

Question 16

How do you find help for commands within R?

SOLUTION: You can either use the command *help()* or place a *?* in front of the function you need help with to search for its help page. The help page will appear in the "Help" tab in the bottom right corner of the RStudio interface.