In-class Exercise 15

Started: Nov 27 at 2:41pm

Quiz Instructions

Question 1 — 1.7 pts

Suppose we have a vector `name` containing names of the 50 students. `grade` is another vector containing final marks (i.e., numeric values between 0 and 100) of those students. You run the following code.

```
v1<-c(name, grade)

v2<-as.numeric(v1)

v3<-as.character(v2)
```

And you created v1, v2, and v3 successfully. Please complete the following four sentences.

`is.numeric(v2[ 1 ])` should return TRUE .

`is.numeric(v2[ 100 ])` should return TRUE .

`is.character(v3[ 1 ])` should return TRUE .

`is.character(v3[ 100 ])` should return TRUE .

Question 2 — 1.66 pts

Again, suppose we have a vector `name` containing names of the 50 students. `grade` is another numeric vector containing final marks of those students.

We run the following code:

```
dat <- data_frame(name, grade)

dat[5,2] <- as.character(dat[5,2])

is.numeric(dat$grade)
```

The output should be

FALSE

Question 3

1.66 pts

Suppose using File Explorer (in Windows) or Finder (in Mac), you browsed to `Documents` folder and you created a folder called `my_data` under the `Documents` folder.

Then you launched your R Studio and set your working directory to `Documents` folder in your computer.

In R Studio, you loaded `tidyverse` and then created a new data frame called `my_data_frame`.

Suppose you want to export `my_data_frame` into a csv file and save it as `my_data.csv` under the `my_data` folder which you have just created under the `Documents` folder. What should be the R code that you need to execute?

- `write_csv(my_data_frame, Documents/my_data/my_data.csv)`
- `write_csv(my_data_frame, Documents/my_data, my_data.csv)`
- `write_csv(my_data_frame, "Documents/my_data/my_data.csv")`
- **`write_csv(my_data_frame, "my_data/my_data.csv")`**
- `write_csv(my_data_frame, "my_data", "my_data.csv")`

Question 4

1.66 pts

Supposed you launched your R Studio and set your working directory to `Documents` folder in your computer.

Suppose there is a folder called `my_data` created under the `Documents` folder.

Suppose `vancouver_housing_price.rds` is a file saved under that `my_data` folder. You want to save the dataset in `vancouver_housing_price.rds` into a csv file. In particular, you want to name the csv file as `vancouver_housing_price.csv` and save it under the same `my_data` folder where rds file resides. Complete the following code to accomplish that.

write_csv (readRDS ("my_data/vancouver_housing_price.

rds "), "my_data/vancouver_housing_price. csv ")

Each blank should be either a name of a function or a file extension (e.g., csv, rds, Rmd etc.).

Question 5

1.66 pts

Alex has a data frame named df with 100 rows. a is the only column in df. a is a *numeric* column and does not have any NA.

He run the following code. Unfortunately, R output an error message.

```
df <- df %>% mutate(b = as.character(a), c = if_else(b>0,a,b))
```

Why did Alex receive an error message? Assume that tidyverse was already loaded.

- ○ the same data frame name should not be in both sides of the assignment operator (i.e., arrow)
- ○ c is a restricted name and cannot be used as a column name
- ○ a *numeric* column cannot be converted into a *character* column
- ◉ second and third arguments in if_else() must be of the same data type

Question 6

1.66 pts

Suppose you open an R Script that Prof. Cavusoglu posted on Canvas in R Studio. Here is the screenshot of a segment of the code.

```
61  # Dear Students,
62
63  # It was a great pleasure to teach this intense and challenging course to such great students.
64  # For me, it has been a rewarding journey that I will foundly remember. I sincerely hope
65  # that you will benefit from the skills you have developed over the last two months in your
66  # academic and professional careers.
67
68  df <- data_frame(turkish = c("Tesekkurler"),
69                   english = c("Thank you"),
70                   french = c("Merci"))
71
72  # The last thing that I wanted to say is:
73
74  df$english[which(df$turkish == "Tesekkurler")]
```

Assume that tidyverse is already loaded in the active R session.

If you execute the entire code in the screenshot (line 61- line74), What would be the output you see on console?

- ○
```
# A tibble: 1 x 3
  turkish     english   french
  <chr>       <chr>     <chr>
1 Tesekkurler Thank you Merci
```
- ● `[1] "Thank you"`
- ○ `[1] "Merci"`
- ○ `Error: unexpected '=' in "df$english[which(df$turkish ="`

Quiz saved at 9:40pm Submit Quiz