In-Class Exercise 2

ⓘ This is a preview of the published version of the quiz

Started: Jul 21 at 3:50p.m.

Quiz Instructions

As long as you are online, your answers will be automatically saved while you complete the exercise. While you have unlimited attempts to complete this in-class-exercise before the due date, only the grade of the last submitted attempt will be recorded.

Question 1 — 1.42 pts

Copy the following code into R (*note: don't worry if you don't know why this works..we didn't cover this code in class and the set.seed() or the runif() functions are not on the exam..this is just for fun..)*

```
set.seed(888)
```

```
rand_vec<-runif(1000000,min=0,max=100)
```

You should have a vector of 1,000,000 randomly generated numbers starting with 2.55, 35.67, 6.14...

What is the standard deviation of `rand_vec`?

The answer is closest to:

- ◯ 0
- ◯ 22.390
- ◯ 25.663
- ◯ 27.483
- ◯ 28.869

Question 2

1.43 pts

The *mtcars* dataset is a built-in dataset in R. Some information about it can be found **here (https://rpubs.com/neros/61800)** .

To see *mtcars* in your Environment page, you can create a new data frame by entering the following comand in the Console:

my_cars <- mtcars

Question: The whole dataset has _____ rows (i.e., observations), and _____ columns (i.e., variables)

Question 3

1.43 pts

What is the **minimum** value of mpg and the **maximum** value of hp, respectively? (rounded to one decimal place)

- ◯ 10.4; 52
- ◯ 15.0; 335
- ◯ 10.4; 205
- ◯ 10.4; 335
- ◯ None of the above.

Question 4

1.43 pts

What is the average horsepower for all cars in the my_cars dataset? Fill in below, round to one decimal place.

Question 5

1.43 pts

Suppose you have created the following vectors:

v1 <- c(5, 10, 15)

v2 <- c("Red", "Yellow", "Blue")

v3 <- c("a", "b")

Now, you want to create a data frame called **df1** that contains these three vectors.

True or False: The following code will successfully create that data frame:

df1 <- data.frame(v1, v2, v3)

- ◯ True
- ◯ False

Question 6

1.43 pts

Suppose you run the following code to create a data frame:

mydf <- data_frame(

a = c(1,2,3,NA,5),

b = c(1,4,9,NA,25)

)

View the dataframe before completing the following questions, using the View(mydf) command.

How would you calculate the variance of the *a* column in *mydf* based on non-missing values? Select all possible options that would do this. If none of them work, then select none of the above.

- [ ] var(a, na.rm = TRUE)
- [ ] var(a, na.rm = FALSE)
- [ ] var(mydf$a, na.rm = TRUE)
- [ ] var(mydf$a, na.rm = FALSE)
- [ ] None of the above (if you choose this option do NOT choose any of the other options)

Question 7

1.43 pts

You would now like to count the number of NA values in column *a* from the dataframe *mydf*. Select all possible lines of code that can achieve this. If none of them work, then select none of the above.

- [ ] sum(is.na(mydf$a))
- [ ] sum(is.na(a))
- [ ] sum(mydf$a, na.rm = TRUE)
- [ ] sum(a, na.rm = TRUE)
- [ ] None of the above

Not saved Submit Quiz