Week 3 Quiz
Quiz, 5 questions

5/5 points (100%)

✓ **Congratulations! You passed!**

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Next Item

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✓   1 / 1
point

1.
Take a look at the 'iris' dataset that comes with R. The data can be loaded with the code:

```
1   library(datasets)
2   data(iris)
```

A description of the dataset can be found by running

```
1   ?iris
```

There will be an object called 'iris' in your workspace. In this dataset, what is the mean of 'Sepal.Length' for the species *virginica*? **Please round your answer to the nearest whole number**.

(Only enter the numeric result and nothing else.)

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Correct Response
To get the answer here, you can use 'tapply' to calculate the mean of 'Sepal.Length' within each species.

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2.

Continuing with the 'iris' dataset from the previous Question, what R code returns a vector of the means of the variables 'Sepal.Length', 'Sepal.Width', 'Petal.Length', and 'Petal.Width'?

○   colMeans(iris)

◉   apply(iris[, 1:4], 2, mean)

Correct

○   apply(iris, 2, mean)

○   apply(iris[, 1:4], 1, mean)

○   rowMeans(iris[, 1:4])

○   apply(iris, 1, mean)

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3.

Load the 'mtcars' dataset in R with the following code

```
1  library(datasets)
2  data(mtcars)
```

There will be an object names 'mtcars' in your workspace. You can find some information about the dataset by running

```
1  ?mtcars
```

How can one calculate the average miles per gallon (mpg) by number of cylinders in the car (cyl)? Select all that apply.

☐ with(mtcars, tapply(mpg, cyl, mean))

Correct

☐ lapply(mtcars, mean)

Un-selected is correct

☐ apply(mtcars, 2, mean)

Un-selected is correct

☐ mean(mtcars$mpg, mtcars$cyl)

Un-selected is correct

☐ sapply(mtcars, cyl, mean)

Un-selected is correct

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4.

Continuing with the 'mtcars' dataset from the previous Question, what is the absolute difference between the average horsepower of 4-cylinder cars and the average horsepower of 8-cylinder cars?

(**Please round your final answer to the nearest whole number**. Only enter the numeric result and nothing else.)

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Correct Response

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5.
If you run

```
1   debug(ls)
```

what happens when you next call the 'ls' function?

○   Execution of 'ls' will suspend at the beginning of the function
    and you will be in the browser.

▲

Correct

○   You will be prompted to specify at which line of the function
    you would like to suspend execution and enter the browser.

○   The 'ls' function will return an error.

○   The 'ls' function will execute as usual.

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