The "Data Science" Specialization Learn More ×

Feedback — Week 3 Quiz

Help

You submitted this quiz on **Mon 14 Apr 2014 10:54 PM PDT**. You got a score of **5.00** out of **5.00**.

Question 1

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

```
library(datasets)
data(iris)
```

A description of the dataset can be found by running

```
?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 only enter the numeric result and nothing else.)

You entered:

6.588

Your Answer		Score	Explanation
6.588	✔	1.00	To get the answer here, you can use 'tapply' to calculate the mean of 'Sepal.Length' within each species.
Total		1.00 / 1.00	

Question 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'?

Your Answer	Score	Explanation

◉ apply(iris[, 1:4], 2, mean)	✔	1.00
○ apply(iris, 1, mean)		
○ colMeans(iris)		
○ rowMeans(iris[, 1:4])		
Total		1.00 / 1.00

Question 3

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

```
library(datasets)
data(mtcars)
```

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

```
?mtcars
```

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

Your Answer		Score	Explanation
○ sapply(mtcars, cyl, mean)			
○ lapply(mtcars, mean)			
◉ sapply(split(mtcars$mpg, mtcars$cyl), mean)	✔	1.00	
○ tapply(mtcars$cyl, mtcars$mpg, mean)			
Total		1.00 / 1.00	

Question 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?

You entered:

126.5779

Your Answer		Score	Explanation
126.5779	✔	1.00	
Total		1.00 / 1.00	

Question 5

If you run

```
debug(ls)
```

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

Your Answer		Score	Explanation
○ The 'ls' function will return an error.			
◉ Execution of 'ls' will suspend at the beginning of the function and you will be in the browser.	✔	1.00	
○ Execution of the 'ls' function will suspend at the 4th line of the function and you will be in the browser.			
○ The 'ls' function will execute as usual.			
Total		1.00 / 1.00	