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**NPTEL (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » Data Science for Engineers (course)**


## Course outline

How does an NPTEL online course work?

Setup Guide

Pre Course Material

### Week 0

☐ FAQ (unit? unit=20&lesson=21)

☐ Quiz: Assignment 0 (assessment? name=119)

☒ Assignment 0 solutions (unit? unit=20&lesson=130)

### Week 1

### Week 2

### Week 3

### Week 4

### Week 5

# Assignment 0

The due date for submitting this assignment has passed.

**Due on 2021-07-26, 23:59 IST.**

As per our records you have not submitted this assignment.

**Note :** This assignment is only for practice purpose and it will not be counted towards the Final score

Create a data frame with given vectors below.

**vec1** = c(1,2,3)

**vec2** = c("Apple", "Orange", "Guava")

**vec3** = c(180,100,50)

Store the data frame in the variable named – “**fruits**”.

**Answer questions from 1 to 3 below. These are based on the data frame created above.**

1) What is the command to extract the information from 2<sup>nd</sup> & 3<sup>rd</sup> rows of the 3<sup>rd</sup> column? **1 point**

- ☐ print(fruits [2:3,3])
- ☐ print(fruits [,2,3])
- ☐ print(fruits [2,3,])
- ☐ print(fruits [,3])

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*print(fruits [2:3,3])*

2) The command to add a new row to the data frame “**fruits**” with the following values **1 point**  
vec1= 4, vec2="Grapes", vec3="120" passed to each vector is:

## Week 6

## Week 7

## Week 8

## Text Transcripts

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- ☐ `fruits =rbind(data.frame(vec1= 4, vec2="Grapes", vec3="120", fruits))`
- ☐ `fruits =rbind(data.frame(vec1= 4, vec2="Grapes", vec3="120"))`
- ☐ `fruits =rbind(data.frame(vec1= 4, vec2="Grapes", vec3="120"), fruits)`
- ☐ `fruits =rbind(fruits, data.frame(vec1= 4, vec2="Grapes", vec3="120"))`

No, the answer is incorrect.

Score: 0

Accepted Answers:

`fruits =rbind(fruits, data.frame(vec1= 4, vec2="Grapes", vec3="120"))`

- 3) The command to add a new column to the data frame "fruits" with vector "vec4" taking values 10,20,30,40 is: - **1 point**

**Note: Please answer the question based on data frame created in question 2**

- ☐ `fruits ==cbind(dataframe(vec4 = c(10,20,30,40), fruits )`
- ☐ `fruits =cbind(fruits ,data.frame(vec4 = c(10,20,30,40)))`
- ☐ `fruits =cbind(fruits.data.frame(vec4 = c(10,20,30,40)))`
- ☐ `fruits =cbind(data.frame(vec4 = c(00,20,30,40)), fruits)`

No, the answer is incorrect.

Score: 0

Accepted Answers:

`fruits =cbind(fruits ,data.frame(vec4 = c(10,20,30,40)))`

- 4) In R studio IDE the shortcut key **ctrl+Shift+S** executes **1 point**

- ☐ all commands in the console and displays the output.
- ☐ selected command alone
- ☐ all commands in the console without displaying them
- ☐ all commands in variable explorer

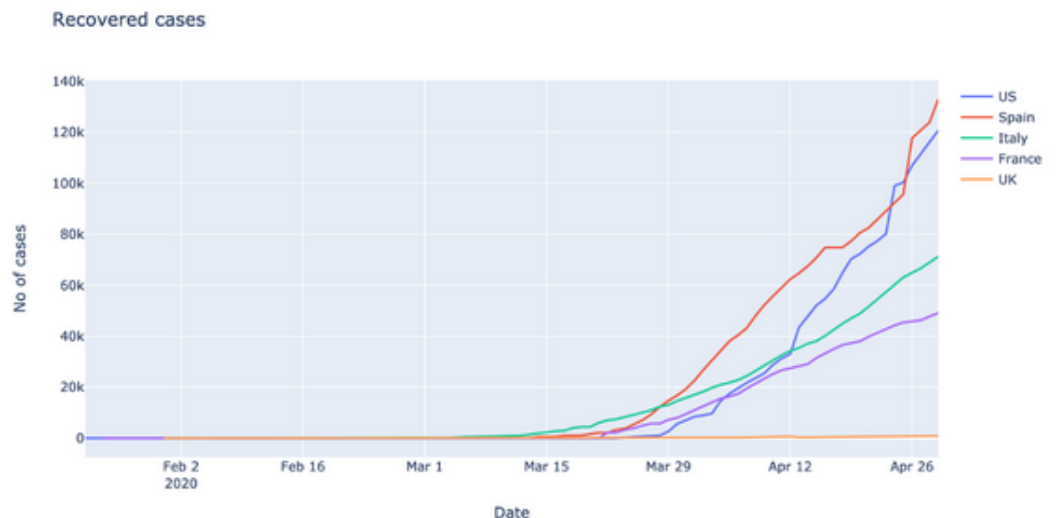
No, the answer is incorrect.

Score: 0

Accepted Answers:

*all commands in the console without displaying them*

- 5) The line graph shows the country wise breakup of the number of cases who have recovered from COVID-19. Which country has the least number of recovered cases? **1 point**



- ☐ France
- ☐ US
- ☐ Italy
- ☐ Spain

No, the answer is incorrect.

Score: 0

Accepted Answers:

*France*

**Create a list using `vec1`, `vec2` and `vec3` and store the vectors in the list variable - "mylist".  
Answer Q6 based on 'mylist'.**

**vec1** = c(6,7,8)

**vec2** = c("Football", "Basketball", "Volleyball")

**vec3** = c("300", "400", "600")

6) Choose the correct command to replace "Basketball" with "Carrom"?

**1 point**

- ☐ `mylist[[2]][3] = "Carrom"`
- ☐ `mylist[[2]][2] = "Carrom"`
- ☐ `mylist[2,3] = "Carrom"`
- ☐ `mylist[2]3 = "Carrom"`

No, the answer is incorrect.

Score: 0

Accepted Answers:

*mylist[[2]][2] = "Carrom"*

7) The library needed to do melt & cast operations in R is \_\_\_\_\_

**1 point**

- ☐ Cars
- ☐ Caret
- ☐ Gdata
- ☐ reshape2

No, the answer is incorrect.

Score: 0

Accepted Answers:

*reshape2*

8) The correct command to build a square matrix 'A' with numbers from 13 to 21, arranged column wise is:-

**1 point**

- ☐ `A = matrix(c(13:21), nrow = 3, ncol = 9, byrow = T)`
- ☐ `A = matrix(c(13:22), nrow = 3, ncol = 1, byrow = F)`
- ☐ `A = matrix(c(13:22), nrow = 3, ncol = 3, byrow = T)`
- ☐ `A = matrix(c(13:21), nrow = 3, ncol = 3, byrow = F)`

No, the answer is incorrect.

Score: 0

Accepted Answers:

*A = matrix(c(13:21), nrow = 3, ncol = 3, byrow = F)*

Answer all the questions from 9 to 10 using the matrix from Question 8:

9) The command to extract all the elements of third column from matrix "A" is \_\_\_\_\_

**1 point**

- ☐ A[3,]
- ☐ A[,3]
- ☐ A(3,)
- ☐ A{3}

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
A[,3]

10) The command to extract the element in 1st row, 1st column from matrix "A" is \_\_\_\_\_

**1 point**

- ☐ A(1,1)
- ☐ A[1,3]
- ☐ A{2,3}
- ☐ A[1,1]

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
A[1,1]