UTP

UNIVERSITI TEKNOLOGI PETRONAS

TEB2164

Introduction to Data Science

Lab Assignment

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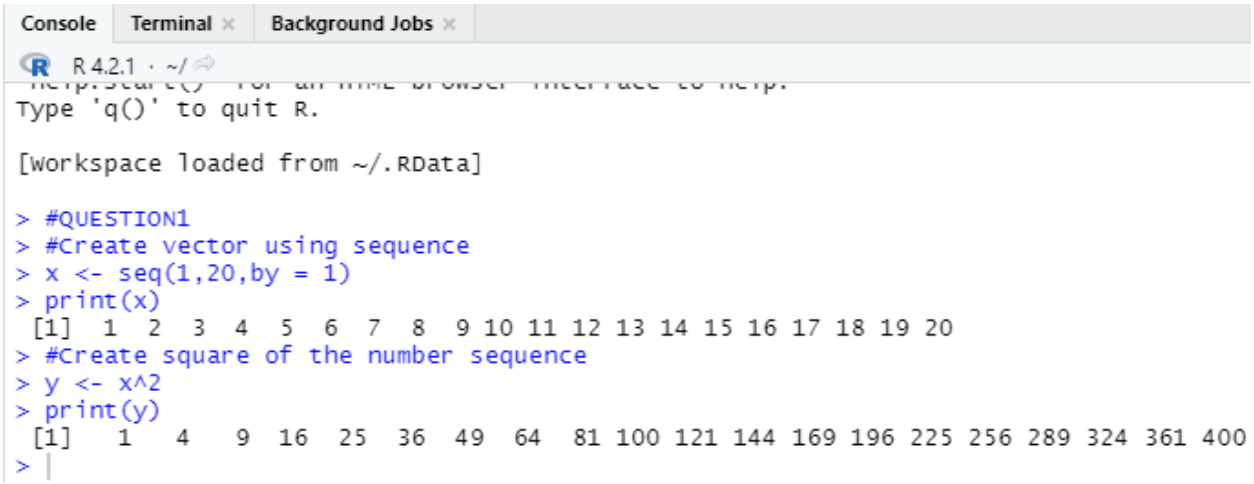
QUESTION 1

Write a R code to create a sequence of 20 numbers. The program will calculate and display the square of the number sequence.

```r
#QUESTION1
#Create vector using sequence
x <- seq(1,20,by = 1)
print(x)
#Create square of the number sequence
y <- x^2
print(y)

```



QUESTION 2

Given two variables, num1=0.956786 and num2=7.8345901. Write a R code to display the num1 value in 2 decimal point number, and num2 value in 3 decimal point number (clue: use function round()).

```
 9  #QUESTION2
10  num1 = 0.956786
11  num2 = 7.8345901
12  #num1 value in 2 decimal point number
13  round(num1, digits = 2)
14  #num2 value in 3 decimal point number
15  round(num2, digits = 3)
16
```

```
> #QUESTION2
> num1 = 0.956786
> num2 = 7.8345901
> #num1 value in 2 decimal point number
> round(num1, digits = 2)
[1] 0.96
> #num2 value in 3 decimal point number
> round(num2, digits = 3)
[1] 7.835
>
```

QUESTION 3

Write a R code that retrieves from the user the radius value of a circle. The program will calculate and display the circle's area.

```
17  #QUESTION3
18  #retrieve darius value of a circle from user
19  r <- readline(prompt="Enter radius: ")
20  # convert character into numeric
21  r <- as.numeric(r)
22  #Calculate and display circle's area
23  a <- (22/7)*(r^2)
24  print(paste("Circle's area: ", a,"cm^2"))
```

```
> #QUESTION3
> #retrieve darius value of a circle from user
> r <- readline(prompt="Enter radius: ")
Enter radius: 50
> # convert character into numeric
> r <- as.numeric(r)
> #Calculate and display circle's area
> a <- (22/7)*(r^2)
> print(paste("Circle's area: ", a,"cm^2"))
[1] "Circle's area:  7857.14285714286 cm^2"
```