ISCG8026 Introduction to Data Science
Semester 1 – 2020
R Programming Assignment A
Due Date: 23 April 2020, 8:30am

Part 5

Write a function that prompts a user to choose an operation between six available operations: 1) Add, 2) Subtract, 3) Multiply, 4) Divide, 5) Factors and 6) Prime number. The first four operations will ask user to provide two numbers and add, subtract, multiply and divide them accordingly. The fifth operation calculates the factors of a number and sixth operation checks if a number is prime.
Please save your code to a file named calculator.R.

Solution:

```
[1] "******Simple R Calculator - Select operation******"
[1] "1.Add"
[1] "2.Subtract"
[1] "3.Multiply"
[1] "4.Divide"
[1] "5.Factors"
[1] "6.Prime"
[1] "7.Exit"
[1] "************************************************"


Enter choice[1/2/3/4/5/6/7]: 1
Enter first number: 2
Enter second number: 4
[1] "2 + 4 = 6"


[1] "******Simple R Calculator - Select operation******"
[1] "1.Add"
[1] "2.Subtract"
[1] "3.Multiply"
[1] "4.Divide"
[1] "5.Factors"
[1] "6.Prime"
[1] "7.Exit"
[1] "************************************************"


Enter choice[1/2/3/4/5/6/7]: 2
Enter first number: 3
Enter second number: 4
[1] "3 - 4 = -1"
```

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```
[1] "******Simple R Calculator - Select operation******"
[1] "1.Add"
[1] "2.Subtract"
[1] "3.Multiply"
[1] "4.Divide"
[1] "5.Factors"
[1] "6.Prime"
[1] "7.Exit"
[1] "************************************************"


Enter choice[1/2/3/4/5/6/7]: 3
Enter first number: 7
Enter second number: 9
[1] "7 * 9 = 63"

 [1] "******Simple R Calculator - Select operation******"
 [1] "1.Add"
 [1] "2.Subtract"
 [1] "3.Multiply"
 [1] "4.Divide"
 [1] "5.Factors"
 [1] "6.Prime"
 [1] "7.Exit"
 [1] "************************************************"


 Enter choice[1/2/3/4/5/6/7]: 4
 Enter first number: 4
 Enter second number: 2
 [1] "4 / 2 = 2"


  [1] "******Simple R Calculator - Select operation******"
 [1] "1.Add"
 [1] "2.Subtract"
 [1] "3.Multiply"
 [1] "4.Divide"
 [1] "5.Factors"
 [1] "6.Prime"
 [1] "7.Exit"
 [1] "************************************************"
```

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```
Enter choice[1/2/3/4/5/6/7]: 5
Enter the number: 63
[1] "The factors of 63 are:"
[1] 1
[1] 3
[1] 7
[1] 9
[1] 21
[1] 63

[1] "******Simple R Calculator - Select operation******"
[1] "1.Add"
[1] "2.Subtract"
[1] "3.Multiply"
[1] "4.Divide"
[1] "5.Factors"
[1] "6.Prime"
[1] "7.Exit"
[1] "************************************************"

Enter choice[1/2/3/4/5/6/7]: 6
Enter the number: 7
[1] "7 is a prime number"

[1] "******Simple R Calculator - Select operation******"
[1] "1.Add"
[1] "2.Subtract"
[1] "3.Multiply"
[1] "4.Divide"
[1] "5.Factors"
[1] "6.Prime"
[1] "7.Exit"
[1] "************************************************"

Enter choice[1/2/3/4/5/6/7]: 8

Enter a valid choice
```

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```
[1] "******Simple R Calculator - Select operation******"
[1] "1.Add"
[1] "2.Subtract"
[1] "3.Multiply"
[1] "4.Divide"
[1] "5.Factors"
[1] "6.Prime"
[1] "7.Exit"
[1] "************************************************"


Enter choice[1/2/3/4/5/6/7]: 2
Enter first number: e
Enter second number: 3

 Enter valid numbers


 [1] "******Simple R Calculator - Select operation******"
[1] "1.Add"
[1] "2.Subtract"
[1] "3.Multiply"
[1] "4.Divide"
[1] "5.Factors"
[1] "6.Prime"
[1] "7.Exit"
[1] "************************************************"


Enter choice[1/2/3/4/5/6/7]: 7
[1] "Thank You"
```