CSE101/CSE103

(*Solve the following problems in R-studio.*)

1. Take 3 inputs from the user: x, y, z. Write a program in R that prints the numbers that are multiples of both x and y from 1 to z using loops.(while or for loop)

2. Write a program in R that takes a number, n and prints a triangle with n steps like the following:

   Hint: Use cat function instead of print() without a new line.

   Sample Input:
   6
   Sample Output:
   *
   **
   ***
   ****
   ******

3. Write a program in R that takes a string input from the user and prints the characters of odd numbered indices using a loop.

   Sample Input:
   Programming

   Sample Output:
   P
   o
   r
   m
   i
   g

   Sample Input:
   Computer

Sample Output:

C

m

u

e

4. Write a program in R that would take an integer input from the user and display if that particular number is a prime number or not.

   A number is a prime number if it is divisible only by itself and 1 (example: 2, 3, 5, 7, 11).

5. Write a R program to update the last element with "R programming" of the following list and prints the new list:

   mylist= list("John","Denver","Max",1,2,4,8,9,11,list("Java"))

6. Write a R program to add a new item "Ford" after the third element of the given list and prints the new list of cars:

   super_cars = list("Ferrari","Audi","Porsche","Lamborghini","Nissan")

7. Write a R program to create an array of two 3x3 matrices each with 3 rows and 3 columns from a given vector and print the second row of the first matrix of the array.

   Given vector: vc1 = c(10,11,12,13,14,15)