Assignment-3

1.Write a function to check an input number is prime or not. The function should return a value of 1 if the number is prime otherwise it should return 0.

2.Write a function to find factorial of a number.

3.What is a recursive function? Why it is used?

4.What happens if you create a loop that never ends?

5.What do you mean by a storage class? Describe various storage classes with proper Example.

6.Write a C program to check whether a triangle is right-angled or not.

7.Write a C program to print the following pattern:
A
BB
CCC
DDDD
EEEEE

8.Define function. What are the advantages of using functions? Write a C program to interchange the contents of two variables using function.

9.Define scope, visibility, and lifetime of a variable. Explain in detail about all storage classes supported in C language with reference to scope and lifetime, visibility, and default value.

10.Illustrate the concept of recursion and base condition of recursion. Construct a recursive function to find the factorial of an input number N.

11.Distinguish between the following:

(a) Actual and formal arguments
(b) Global and local variables
(c) Automatic and static variables

12.The main is a user-defined function. How does it differ from other user-defined functions?

13.What is prototyping? Why is it necessary?

14. Write a function that takes an integer parameter m representing the month number of the year and returns the corresponding name of the month. For instance, if m = 3, the month is March. Test your program.