# LAB: 13

## Q.1 Write a program to find factorial using recursion

### Program

```c
1  //write a program to find the factorial of a given number using Recursion.
2  #include<stdio.h>
3  int fact(int);   // declaring function
4  void main()
5  {
6      int a, fac;
7      printf("Enter the value of a : ");
8      scanf("%d", &a);
9      fac = fact(a);
10     printf("The factorial of a is %d", fac);
11 }
12 int fact(int a)
13 {
14     if (a == 1)
15     return (1);
16     else
17     return fact(a-1)*a;
18 }
```

### Output

```
C:\Users\admin\Desktop\recursion.exe
Enter the value of a : 7
The factorial of a is 5040
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Process exited after 5.527 seconds with return value 26
Press any key to continue . . .
```