EX 7	PROGRAM TO FIND FACTORIAL OF A GIVEN NUMBER
DATE:	

AIM:

To find factorial of a given number

ALGORITHM:

Step 1. Start the program

Step 2. Get the number

Step 3. If the number < 0 print "Error for finding a factorial"

Step 4. Else Initialize variables factorial←1 i←1

Step 5. Read value of n

Step 6. Repeat the steps until i=n 6.1: factorial←factorial,   i←i+1

Step 7. Display factorial

Step 8.   Stop the program

PROGRAM:

```
int main()

 {

int n, i; longfactorial = 1; printf("Enter
an integer: "); scanf("%d",&n);
// show error if the user enters a negative integer if
(n < 0)
printf("Error! Factorial of a negative number doesn't exist.");
 else
```

```c
        {

    for(i=1; i<=n; ++i)
{

            factorial *= i;

            // factorial = factorial*i;

      }

            printf("Factorial of %d = %lu", n, factorial);

                 }

            return 0;

              }
```

OUTPUT:

Enter an integer: 10
Factoriaof 10 = 3628800

RESULT

Thus the C Program to find the factorial of a given number has been successfully executed and verified.