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**PROGRAM: BS(CS)**

**ICT\_TASK #09**

## Q1: WRITE A PROGRAM IN C++ TO CHECK WHETHER A NUMBER IS PRIME OR NOT.

### SOURCE CODE:

```
#include <iostream>
using namespace std;

int main()
{
    int flag = 0, n;
    cout << "Enter a number: ";
    cin >> n;
    for (int j = 2; j < n; j++)
    {
        if (n % j == 0)
        {
            flag = 1;
        }
    }

    if ((flag == 0) && !(n < 2))
    {
        cout << "it is a prime number " << n;
    }
    else
    {
        cout << "It is not a prime number " << n << endl;
    }
}
```

# OUTPUT:

```
D:\Maqsood's Data\C PROGRAMMING PRACTICE\C++ Ict_Projects>g++ ict_lab_final.cpp

D:\Maqsood's Data\C PROGRAMMING PRACTICE\C++ Ict_Projects>a.exe
Enter a number: 1
It is not a prime number 1

D:\Maqsood's Data\C PROGRAMMING PRACTICE\C++ Ict_Projects>a.exe
Enter a number: 2
it is a prime number 2
D:\Maqsood's Data\C PROGRAMMING PRACTICE\C++ Ict_Projects>a.exe
Enter a number: 3
it is a prime number 3
D:\Maqsood's Data\C PROGRAMMING PRACTICE\C++ Ict_Projects>a.exe
Enter a number: 7
it is a prime number 7
D:\Maqsood's Data\C PROGRAMMING PRACTICE\C++ Ict_Projects>a.exe
Enter a number: 9
It is not a prime number 9

D:\Maqsood's Data\C PROGRAMMING PRACTICE\C++ Ict_Projects>a.exe
Enter a number: 15
It is not a prime number 15

D:\Maqsood's Data\C PROGRAMMING PRACTICE\C++ Ict_Projects>a.exe
Enter a number: 17
it is a prime number 17
D:\Maqsood's Data\C PROGRAMMING PRACTICE\C++ Ict_Projects>a.exe
Enter a number: 19
it is a prime number 19
D:\Maqsood's Data\C PROGRAMMING PRACTICE\C++ Ict_Projects>
```

## Q2. WRITE A PROGRAM IN C++ TO FIND THE FACTORIAL OF A NUMBER.

### SOURCE CODE:

```
#include <iostream>
using namespace std;

int main()
{
    int fact = 1, n;
    cout << "Enter a number: ";
    cin >> n;
    for (int j = 1; j <= n; j++)
    {
        fact = fact * j;
    }
    cout << n << "'s Factorial is: " << fact << endl;
}
```

### OUTPUT:

```
D:\Maqsood's Data\C PROGRAMMING PRACTICE\C++ Ict_Projects>a.exe
Enter a number: 8
8's Factorial is: 40320

D:\Maqsood's Data\C PROGRAMMING PRACTICE\C++ Ict_Projects>a.exe
Enter a number: 2
2's Factorial is: 2

D:\Maqsood's Data\C PROGRAMMING PRACTICE\C++ Ict_Projects>a.exe
Enter a number: 4
4's Factorial is: 24

D:\Maqsood's Data\C PROGRAMMING PRACTICE\C++ Ict_Projects>a.exe
Enter a number: 5
5's Factorial is: 120

D:\Maqsood's Data\C PROGRAMMING PRACTICE\C++ Ict_Projects>a.exe
Enter a number: 6
6's Factorial is: 720

D:\Maqsood's Data\C PROGRAMMING PRACTICE\C++ Ict_Projects>a.exe
Enter a number: 7
7's Factorial is: 5040

D:\Maqsood's Data\C PROGRAMMING PRACTICE\C++ Ict_Projects>a.exe
Enter a number: 8
8's Factorial is: 40320
```