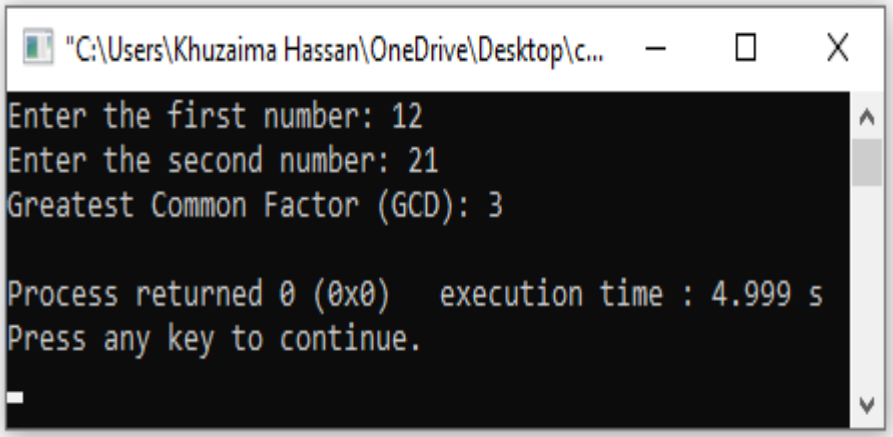
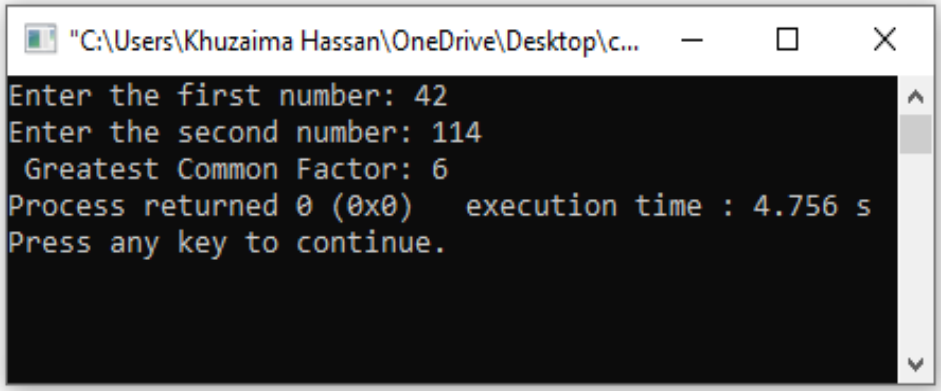
CODE NO 6

```cpp
#include<iostream>
using namespace std;
int main ()
{
    int first_number,second_number,GCD;
    cout<<"Enter the first number: ";
    cin>>first_number;
    cout<<"Enter the second number: ";
    cin>>second_number;
    for(int i = 1;i<=first_number&&i<=second_number;i++)
    {
        if(first_number%i == 0 && second_number%i == 0)
        {
            GCD = i;
        }

    }
    cout<<"Greatest Common Factor (GCD): "<<GCD<<endl;
    return 0;
}
```



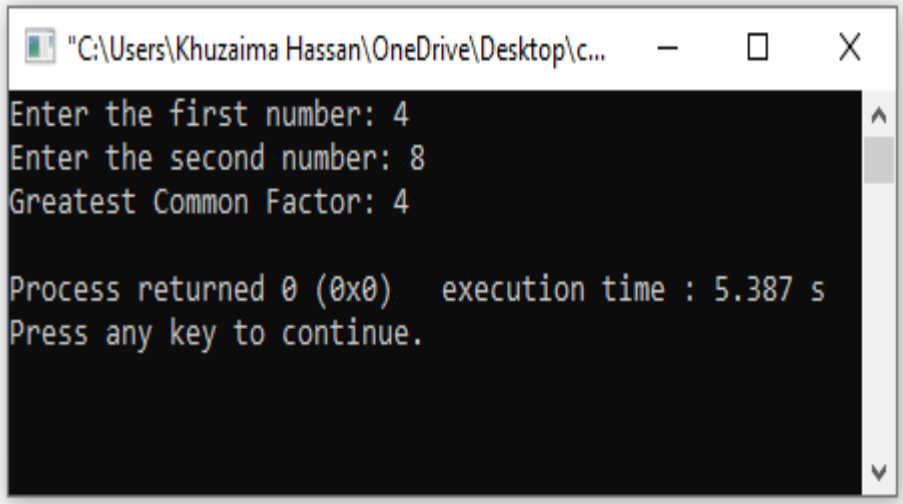
CODE NO 7

```cpp
#include<iostream>
using namespace std;
int main ()
{
    int num1, num2;
    cout<<"Enter the first number: ";
    cin>>num1;
    cout<<"Enter the second number: ";
    cin>>num2;
    while (num1 != num2)
    {
        if (num1 > num2)
        {
            num1 = num1 - num2;
        }
        else
            {
                num2 = num2 - num1;
            }
        }
        cout<<" Greatest Common Factor: "<<num1;
        return 0;

}
```



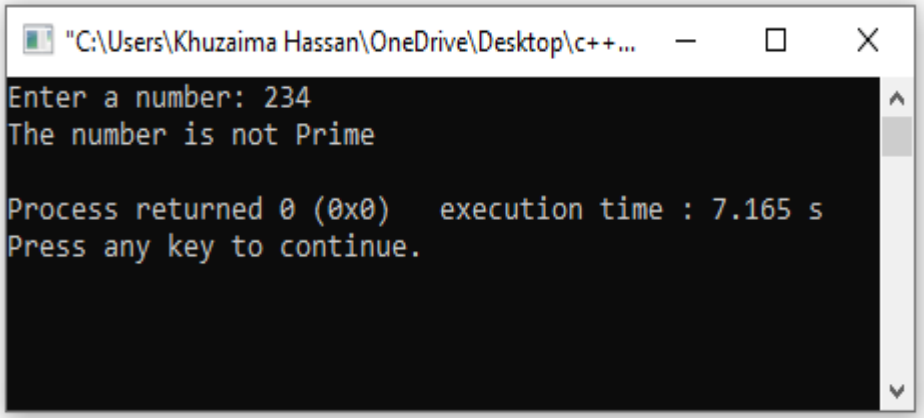
CODE NO 8

```cpp
#include<iostream>
using namespace std;
int main ()
{
    int a,b;
    cout<<"Enter the first number: ";
    cin>>a;
    cout<<"Enter the second number: ";
    cin>>b;
    while (b != 0)
    {
        int r = a%b;
        a = b;
        b = r;
    }
    cout<<"Greatest Common Factor: "<<a<<endl;
    return 0;
}
```



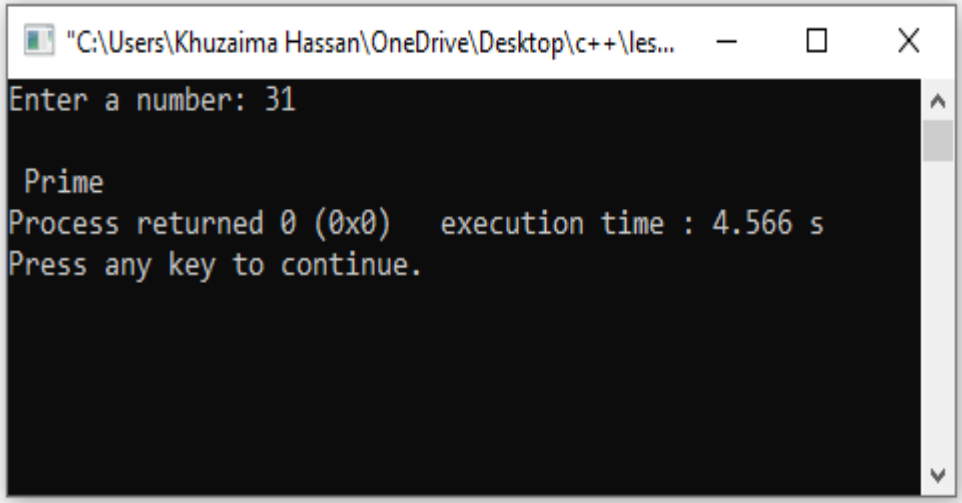
CODE NO 10

```cpp
#include<iostream>
using namespace std;
int main ()
{
    int num;
    cout<< "Enter a number: ";
    cin>>num;
    for(int i = 2; i < num; i++)
    {
        if (num % i == 0)
        {
            cout<< "The number is not Prime" <<endl;
            return 0;
        }
    }
    cout<<"The number is Prime" <<endl;
    return 0;
}
```



CODE NO 11

```
#include<iostream>
#include<conio.h>
#include<cmath>
using namespace std;
int main (void)
{
    int num,divisor,remainder;
    cout<<"Enter a number: ";
    cin>>num;
    if((num>2) && (num%2==0) )
    {
        cout<<"\n The number is composite";
        return 0;
    }
    if ((num>3) && (num%3==0))
    {
        cout<<"\n The number is composite";
        return 0;
    }
    if (num == 2)
    {
        cout<<"\nThe number is prime";
        return 0;
    }
    for (divisor = 2; divisor<=(int)sqrt((double)num);divisor++)
```



CODE NO 11

```
    {
        cout<<"\n The number is composite";
        return 0;
    }
    if (num == 2)
    {
        cout<<"\nThe number is prime";
        return 0;
    }
    for (divisor = 2; divisor<=(int)sqrt((double)num);divisor++)
    {
        remainder = num%divisor;
        if (remainder == 0)
        {
            cout<<"\n  Composite";
            break;
        }
    }
    if (remainder != 0 )
    {
        cout<<"\n Prime";
    }
    return 0;
}
```