

/*Write a recursive program to find Greatest Common Division GCD of two numbers.*/

#include <iostream>

using namespace std;

int hcf(int n1, int n2)

{

if (n2 != 0)

return hcf(n2, n1 % n2);

else

return n1;

}

int main()

{

int n1, n2;

cout<<"Enter first positive integer: ";

cin>>n1;

cout<<"\nEnter second positive integer: ";

cin>>n2;

cout<<"\nG.C.D of "<<n1<<" and "<<n2<<" is "<<hcf(n1, n2)<<endl;

return 0;

}

/*Write a recursive program to find Greatest Common Division GCD of two numbers.*/

#include <iostream>

using namespace std;

int gcd(int num1, int num2)

{

if (num2 == 0)

return num1;

else

return gcd(num2, (num1 % num2));

}

int main()

{

```

int num1, num2;
cout << "Enter two numbers : ";
cin >> num1 >> num2;
cout << "GCD of " << num1 << " and " << num2 << " is : " << gcd(num1, num2);
cout << endl;
}

```

/*Write a recursive program to find Greatest Common Division GCD of two numbers.*/

```

#include <iostream>
using namespace std;
int gcd(int n1, int n2);
int main()
{
    int n1,n2;
    cout<<"Enter two positive integers: ";
    cin>>n1>>n2;
    cout<<"GCD of "<<n1<<" & "<<n2<<" is: "<< gcd(n1, n2);
    return 0;
}
int gcd(int n1, int n2)
{
    if (n2 != 0)
        return gcd(n2, n1 % n2);
    else
        return n1;
}

```

/*Write a recursive program to find Greatest Common Division GCD of two numbers.*/

```

#include<iostream>
using namespace std;
class GCD

```

```

{
public:
    int common_divisor(int n1,int n2)
    {
        if(n1==n2)
        {
            return n1;
        }
        else if (n1>n2)
        {
            return common_divisor(n1-n2,n2);
        }
        else
        {
            return common_divisor(n1,n2-n1);
        }
    }
};

int main()
{
    int number1,number2;
    cout<<"Enter first integer:\t";
    cin>>number1;
    cout<<"Enter second integer:\t";
    cin>>number2;
    GCD g;
    cout<<endl<<"greatest common divisor of "<<number1<<" and
"<<number2<<" is "<<g.common_divisor(number1,number2);
}

```