

Exercise:11

Date:20/11/2020

AIM:

To write a Python program to find the greatest common divisor(gcd) of two integers using recursion.

PROGRAM:

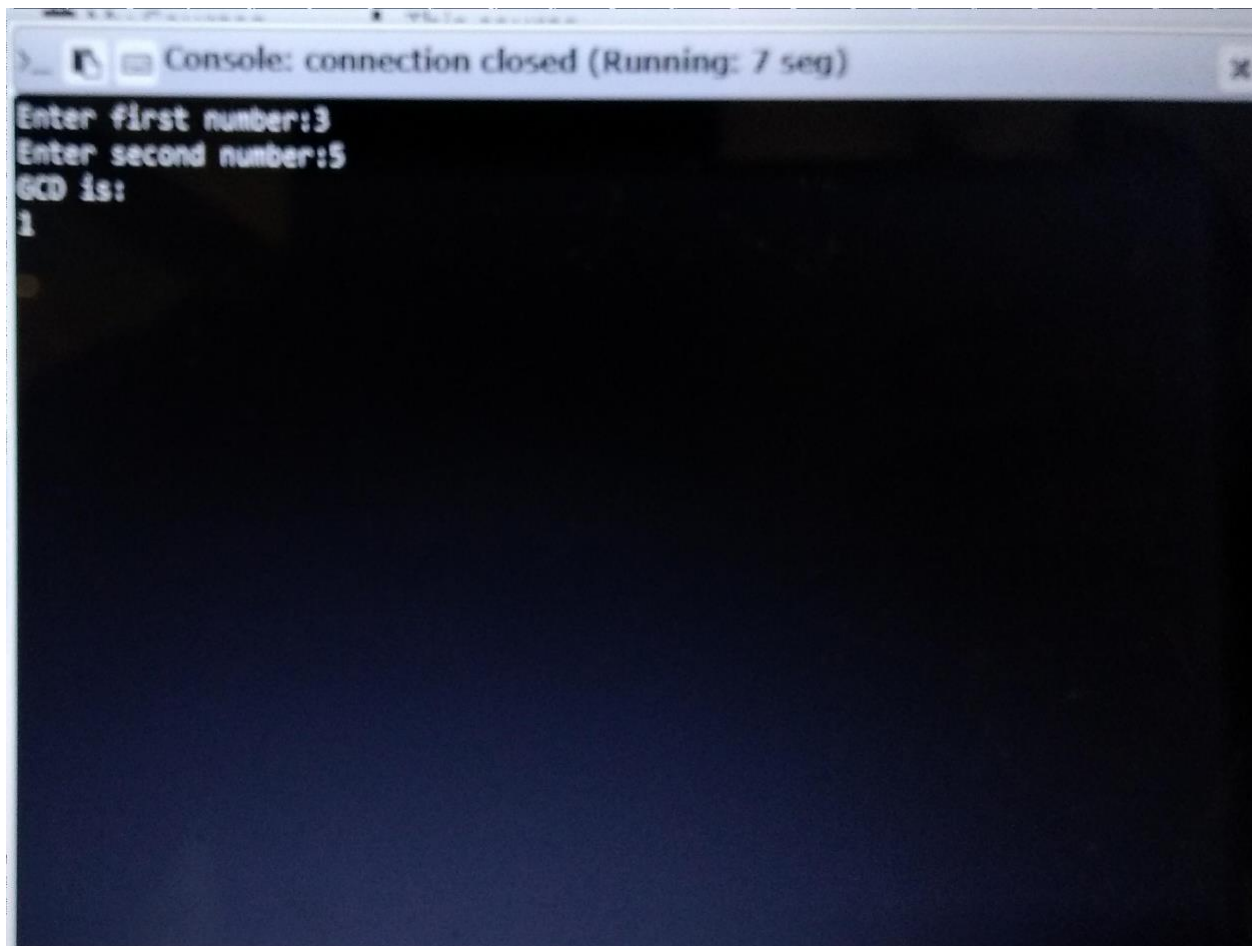
```
def gcd(a,b):  
    if(a==0):  
        return a  
    if(b==0):  
        return b  
    if(a==b):  
        return b  
    if(a>b):  
        return(gcd(a-b,b))  
    else:  
        return gcd(a,b-a)
```

```
a=int(input("Enter first number:"))  
b=int(input("Enter second number:"))  
GCD=gcd(a,b)  
print("GCD is:")  
print(GCD)
```

MOODLE LINK:

<http://103.53.53.18/mod/vpl/forms/edit.phy?id=326&userid=1794#>

OUTPUT:



A screenshot of a console window with a dark background. The title bar at the top reads "Console: connection closed (Running: 7 seg)". The console output consists of four lines of white text: "Enter first number:3", "Enter second number:5", "GCD is:", and "1".

```
Enter first number:3
Enter second number:5
GCD is:
1
```

RESULT:

The program to find the greatest common divisor (gcd) of two integers using recursion is executed and output is verified