

EX04 : Find the GCD of two numbers

AIM:

To write a program to find the GCD of two numbers using function.

Equipments Required:

1. Hardware – PCs
2. Anaconda – Python 3.7 Installation / Moodle-Code Runner

Algorithm

1. Define a function.
2. Get the two numbers from the user.
3. Compare the two values, to find the smaller number.
4. Use for() and if() loop to find the GCD of the two numbers.

Program:

```
/*  
Program to find the gcd of two number using function.  
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def gcd():  
    n1,n2=int(input()),int(input())  
    if n1>n2:  
        small=n2  
    else:  
        small=n1  
    for i in range(1,small+1):  
        if(n1%i==0 and n2%i==0):  
            hcf=i  
    print(f"GCD of two numbers is: {hcf}")  
*/
```



Output:

Question 1
Correct
Mark 10.00 out of 10.00
Flag question

Write a python Program to find the gcd of a number using function

Answer: (penalty regime: 0 %)

```
1 def gcd():
2     n1,n2=int(input()),int(input())
3     if n1>n2:
4         small=n2
5     else:
6         small=n1
7     for i in range(1,small+1):
8         if(n1%i==0 and n2%i==0):
9             hcf=i
10    print(f"GCD of two numbers is: {hcf}")
```

	Test	Input	Expected	Got	
✓	gcd()	30 25	GCD of two numbers is: 5	GCD of two numbers is: 5	✓
✓	gcd()	58 46	GCD of two numbers is: 2	GCD of two numbers is: 2	✓
✓	gcd()	23 17	GCD of two numbers is: 1	GCD of two numbers is: 1	✓

Passed all tests! ✓

Show/hide question author's solution (Python3)

Correct

Marks for this submission: 10.00/10.00.

Result:

Thus the program to find the GCD of two numbers is written and verified using python programming.