

EX. NO.:-
DATE:-

COMPUTE GCD OF TWO NUMBERS

AIM:-

To find the GCD of two numbers.

ALGORITHM:-

Step 1:- Get 2 Integer inputs from the user.

Step 2:- Use decision making statements or use recursion to check if both the given numbers are divisible by any number 'i' without leaving any remainder.

Step 3:- If the above statement is True, then $GCD = 'i'$

Step 4:- Print the GCD of the two numbers.

Step 5:- End the program.

SOURCE CODE:-

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

```
a = int(input("Enter num 1"))
```

```
b = int(input("Enter num 2"))
```

```
GCD = gcd(a,b)
```

```
print("GCD is:")
```

```
print(GCD)
```

Output:-

Enter first number: 24

Enter second number: 30

GCD is:

6

Result:-

The above program is executed successfully

and the result is observed.

```
1  #GCD of 2 Numbers
2  def gcd(a,b):
3      if(b==0):
4          return a
5      else:
6          return gcd(b,a%b)
7  a=int(input("Enter first number:"))
8  b=int(input("Enter second number:"))
9  GCD=gcd(a,b)
10 print("GCD is:")
11 print(GCD)
12 |
```

Enter first number:24

Enter second number:30

GCD is:

6

> |