

Ex NO: 1

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COMPUTE GCD OF TWO NUMBER

Aim:

To find the GCD of two numbers.

Algorithm:

Step 1: Get 2 integer input from the user.

Step 2: Use decision making statements or use recursion to check if both the given number are divisible by any two 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 to the program

source code:

```
def GCD_Loop(a, b):
```

```
    if a > b:
```

```
        temp = b
```

```
    else:
```

```
        temp = a
```

```
    for i in range(1, temp + 1):
```

```
        if ((a % i == 0) and (b % i == 0)):
```

```
            gcd = i
```

```
    return gcd
```

```
x = int(input("Enter a first number:"))  
y = int(input("Enter the second  
number:"))
```

```
num = GCD_Loop(x, y)
```

```
print("GCD of two number is :")
```

```
print(num)
```

~~result~~

output

Enter the first number = 60

Enter the second number = 24

GCD of two number is : 12

Result:

The program is find the GCD
of two number is successfull.