TECHNICAL HUB

Description

GCD or HCF

Program Description

Find the GCD of given two numbers.

GCD: Highest Common Factor or Greatest Common Divisor of two or more integers, when at least one of them is not zero is the largest positive integer that evenly divides the numbers without a remainder.

Example: The GCD of 8 and 12 is 4.

Input Format

A single line contains two integers are N and M.

Output Format

Display the GCD of given two integers.

Constraints

$1 <= M, N <= 10^4$

Explaination

We have two integers 8 and 12. Let's find the HCF.

The divisors of 8 are:

8-> 1, 2, 4, 8

The divisors of 12 are:

12-> 1, 2, 3, 4, 6, 12

HCF /GCD is the greatest common divisor. So HCF of 8 and 12 are 4.

Input-1

8 12

Output-1

4

C - GCC 11.1.0 ▾   Timer   0:10 sec

```c
#include<stdio.h>
int gcd(int a, int b)
{
    while (b != 0) {
        int temp = b;
        b = a % b;
        a = temp;
    }
    return a;
}
int main() {
    int N, M;
    scanf("%d %d", &N, &M);
    int result = gcd(N, M);
    printf("%d", result);
    return 0;
}
```

</> Run Code

Compiler Response

#	Testcase	Input	Expected Output	Your Output	Memory	CPU time	Result
1	8 12	8 12	4	4	1408 KB	3.561 ms	Pass
2	12 24	12 24	12	12	1408 KB	2.576 ms	Pass

All hidden testcases passed

TECHNICAL HUB

Contact

Call: +91 83 43 81 81 81

Email: support@technicalhub.io

Our Social Media

Light