

**Started on** Monday, 4 August 2025, 4:08 PM

**State** Finished

**Completed on** Monday, 4 August 2025, 4:29 PM

**Time taken** 20 mins 38 secs

**Marks** 1.00/1.00

**Grade** **10.00** out of 10.00 (**100%**)

**Question 1** | Correct Mark 1.00 out of 1.00

Convert the following algorithm into a program and find its time complexity using counter method.

```
Factor(num) {
{
    for (i = 1; i <= num; ++i)
    {
        if (num % i == 0)
        {
            printf("%d ", i);
        }
    }
}
```

**Note:** No need of counter increment for declarations and scanf() and counter variable printf() statement.

**Input:**

A positive Integer n

**Output:**

Print the value of the counter variable

**Answer:**

Reset answer

```
1 #include<stdio.h>
2 int Factor(int num)
3 {
4     int c=0;
5     for (int i = 1; i <= num; ++i)
6     {
7         c++;
8         c++;
9         if (num % i == 0)
10        {
11            //printf("%d ", i);
12            c++;
13        }
14    }
15    c++;
16    return c;
17 }
18 int main(){
19     int num;
20     scanf("%d",&num);
21     printf("%d",Factor(num));
22 }
```

	Input	Expected	Got	
✓	12	31	31	✓
✓	25	54	54	✓

	Input	Expected	Got	
✓	4	12	12	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.