

**Started on** Thursday, 31 July 2025, 9:20 AM

**State** Finished

**Completed on** Thursday, 31 July 2025, 9:34 AM

**Time taken** 14 mins 7 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 void factor(int);
3 int main(){
4     int num;
5     scanf("%d",&num);
6     factor(num);
7 }
8 void factor(int num){
9     int count=0;
10    for(int i=1;i<=num;++i)
11    {
12        count++;
13        count++;
14        if(num%i==0){
15            //printf("%d",i);
16            count++;
17        }
18    }
19    count++;
20    printf("%d",count);
21 }
```

	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.