



Started on	Wednesday, 13 August 2025, 9:30 PM
State	Finished
Completed on	Wednesday, 13 August 2025, 9:34 PM
Time taken	4 mins 11 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:

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

	Input	Expected	Got	
✓	12	31	31	✓
✓	25	54	54	✓
✓	4	12	12	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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