

Started on	Thursday, 31 July 2025, 8:51 AM
State	Finished
Completed on	Thursday, 31 July 2025, 9:04 AM
Time taken	12 mins 54 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 {
5     int num;
6     scanf("%d",&num);
7     Factor(num);
8 }
9 void Factor(int num)
10 {
11     int count=0;
12     for(int i=1; i<=num;++i)
13     {
14         count++;
15         //count++;
16         if(num%i==0)
17         {
18             count++;
19             //printf("%d",i);
20             //ount++;
21         }count++;
22     }
23     count++;
24     printf("%d",count);
25 }
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.