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Started on	Friday, 4 October 2024, 2:06 PM
State	Finished
Completed on	Friday, 4 October 2024, 2:07 PM
Time taken	1 min 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:

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

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

[◀ Problem 2: Finding Complexity using Counter method](#)

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