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Started on	Tuesday, 13 August 2024, 2:39 PM
State	Finished
Completed on	Tuesday, 13 August 2024, 2:54 PM
Time taken	14 mins 32 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 {
4     int c=0;
5     for (int i = 1; i <= num; ++i)
6     {
7         c++;
8         if (num % i == 0)
9         {
10             c++;
11             //printf("%d ", i);
12         }
13         c++;
14     } c++;
15     printf("%d", c);
16 }
17
18 int main(){
19     int n;
20     scanf("%d", &n);
21     Factor(n);
22 }
```

	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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