Started on	Friday, 9 August 2024, 2:12 PM
State	Finished
Completed on	Friday, 9 August 2024, 2:16 PM
Time taken	4 mins
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
3   void Factor(int num)
4   {
5       int count = 0;
6       for (int i = 1; i <= num;++i)
7       { count++;
8        if (num % i== 0)
9           {
10               count++;
11             //printf("%d ", i);
12
13           }
14           count++;
15       }
16       count++;
17       printf("%d",count);
18     }
19
20   int main()
21   {
22       int n;
23       scanf("%d",&n);
24       Factor(n);
25   }
26
```

	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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