Started on	Tuesday, 13 August 2024, 2:35 PM
State	Finished
Completed on	Tuesday, 13 August 2024, 2:43 PM
Time taken	7 mins 48 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         }
14          c++;
15      } c++;
16      printf("%d",c);
17   }
18 ▾ int main(){
19       int n;
20       scanf("%d",&n);
21       Factor(n);
22   }
23
```

	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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