Started on	Friday, 9 August 2024, 2:24 PM
State	Finished
Completed on	Friday, 9 August 2024, 2:30 PM
Time taken	5 mins 51 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:

```
#include<stdio.h>
int main()

 {
     int num,c=0;
     scanf("%d",&num);
    for (int i = 1; i <= num;++i)
    {
        c++;
        if (num % i== 0)
        {
          //printf("%d ", i);
            c++;
        }
        c++;
    }
    c++;
```

```
18      printf("%d",c);
19  }
```

	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

Jump to...

Problem 4: Finding Complexity using Counter Method ▶