Started on	Monday, 19 August 2024, 10:30 AM
State	Finished
Completed on	Monday, 26 August 2024, 6:56 PM
Time taken	7 days 8 hours
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>
void Factor(int num) {

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

        }
        c++;
    }
    printf("%d",c);

 }

int main()
{
    int n;
    scanf("%d",&n);
    Factor(n);
}
```

	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 ►