Started on	Tuesday, 13 August 2024, 2:29 PM
State	Finished
Completed on	Tuesday, 13 August 2024, 2:46 PM
Time taken	16 mins 17 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:

```c
#include<stdio.h>
void factor(int num) {
   int count=0;
    for (int i = 1; i <= num;++i)
    {count=count+2;

     if (num % i== 0)
        {
         // printf("%d ", i);
         count++;
        }
     } count++;

   printf("%d",count);
}
int main()
{int num;
    scanf("%d",&num);
    factor(num);
}
```

	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 ►