Started on	Tuesday, 20 August 2024, 2:00 PM
State	Finished
Completed on	Tuesday, 20 August 2024, 2:29 PM
Time taken	28 mins 43 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 factor(int num){

  int count=0;

  for(int i=1; i<=num; ++i){

    count++;

    count++;

    if(num%i==0){

      //print("%d",i);//

      count++;

    }

  }

  count++;

  return count;

}

int main(){

  int n;

  scanf("%d",&n);

  printf("%d",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 ►