Started on	Tuesday, 20 August 2024, 2:12 PM
State	Finished
Completed on	Tuesday, 20 August 2024, 2:48 PM
Time taken	36 mins 31 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  int count=0;
3  void Factor(int num)
4  {
5      for (int i = 1; i <= num;++i)
6      {
7          count++;
8        if (num % i== 0)
9          {
10              count++;
11              //printf("%d ", i);
12
13          }
14          count++;
15      }
16      count++;
17   printf("%d",count);
18
19  }
20  int main(){
21      int a ;
22      scanf("%d",&a);
23      Factor(a);
24  }
```

	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 ►

Correct

Marks for this submission: 1.00/1.00.