Started on	Thursday, 29 August 2024, 10:21 AM
State	Finished
Completed on	Thursday, 29 August 2024, 10:21 AM
Time taken	12 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 Factor(int num){
3      int c=0;
4      for (int i = 1; i <= num;++i){
5          c++;
6          if (num % i== 0){
7            //printf("%d ", i);
8             c++;
9          }
10          c++;
11      }
12      c++;
13  return c++;
14  }
15  int main(){
16      int num;
17      scanf("%d",&num);
18      printf("%d",Factor(num));
19  }
20
21
```

	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...