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Started on	Friday, 9 August 2024, 2:40 PM
State	Finished
Completed on	Friday, 9 August 2024, 2:43 PM
Time taken	2 mins 35 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  void factor(int num)
3  {
4      int c=0;
5      for (int i = 1; i <= num;++i)
6      {
7          c++;
8          if (num % i== 0)
9          {
10
11              //printf("%d ", i);
12              c++;
13          }
14          c++;
15      }
16      printf("%d",++c);
17  }
18  int main(){
19      int n;
20      scanf("%d",&n);
21      factor(n);
22  }
23
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](#)

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