Started on	Monday, 4 August 2025, 4:04 PM
State	Finished
Completed on	Monday, 4 August 2025, 4:18 PM
Time taken	14 mins 30 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:

Reset answer

```c
#include<stdio.h>
int factor(int num){
    int counter = 0;
    for(int i=1;i<=num;++i)
    {
        counter++;
        counter++;
        if(num%i==0)
        {
            //printf("%d",i);
            counter++;
        }
    }counter++;
    return counter;
}
int main()
{
    int num;
    scanf("%d",&num);
    int ans = factor(num);
    printf("%d",ans);
}
```

	Input	Expected	Got	
✔	12	31	31	✔
✔	25	54	54	✔

	Input	Expected	Got	
✔	4	12	12	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.