Started on	Wednesday, 13 August 2025, 10:33 AM
State	Finished
Completed on	Wednesday, 13 August 2025, 10:43 AM
Time taken	9 mins 27 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 c=0;
void Factor(int num) {
    c++;
    for (int i = 1; i <= num;++i)
    {
```

```
        c++;
        c++;
    if (num % i== 0){
        c++;

        }
    }

}
int main(){
     int a;
     scanf("%d",&a);
     c=0;
     Factor(a);
     printf("%d\n",c);
     return 0;

 }
```

	Input	Expected	Got	
✔	12	31	31	✔
✔	25	54	54	✔
✔	4	12	12	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Back to Course