RAJALAKSHMI ENGINEERING COLLEGE

🔔   **CHANDRU G S 2024-CSE** ⌄   **C2**

Started on	Sunday, 31 August 2025, 10:21 AM
State	Finished
Completed on	Sunday, 31 August 2025, 10:37 AM
Time taken	16 mins 18 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:

```c
1  #include<stdio.h>
2  void Factor(int);
3
4  int main(){
5      int n;
6      scanf("%d",&n);
7      Factor(n);
8  }
9
10 void  Factor(int num) {
11     int c=0;
12     c++;
13     for (int i = 1; i <= num;i++)
14     {c++;
15      c++;
16     if (num % i== 0)
17        {
18         c+=1;
19          //printf("%d ", i);
20        }
21      }
22     printf("%d",c);
23 }
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

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