🏠 Dashboard   My courses

Quiz navigation

1 ✓

Finish review

CS23331-DAA-2024-CSE / Problem 3: Finding Complexity using Counter Method

☑ Problem 3: Finding Complexity using Counter Method

Started on	Wednesday, 20 August 2025, 8:20 AM
State	Finished
Completed on	Wednesday, 20 August 2025, 8:35 AM
Time taken	15 mins 3 secs
Marks	1.00/1.00
Grade	**10.00** out of 10.00 (**100**%)

Question 1   Correct   Mark 1.00 out of 1.00   ⚑ Flag question

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