

[Dashbo...](#) / [My cour...](#) / [CS23331-DAA-2023-...](#) / [Finding Time Complexity of Algorit...](#) / [Problem 2: Finding Complexity using Counter me...](#)

Started on	Tuesday, 20 August 2024, 1:37 PM
State	Finished
Completed on	Tuesday, 20 August 2024, 2:06 PM
Time taken	28 mins 39 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 the counter method.

```
void func(int n)
{
    if(n==1)
    {
        printf("*");
    }
    else
    {
        for(int i=1; i<=n; i++)
        {
            for(int j=1; j<=n; j++)
            {
                printf("*");
                printf("*");
                break;
            }
        }
    }
}
```

Note: No need of counter increment for declarations and scanf() and count variable printf() statements.

Input:

A positive Integer n

Output:

Print the value of the counter variable

Answer: (penalty regime: 0 %)

```
1  #include<stdio.h>
2
3  void func(int n)
4  {int counter=0;
5      if(n==1)
6      {
7          counter++;
8          printf("*");
9      }
10     else
11     {
12         counter++;
13         for(int i=1; i<=n; i++)
14         {
15             counter++;
16             for(int j=1; j<=n; j++)
17             {
18                 counter++;
19                 counter++;
20                 counter++;
21                 //printf("*");
22                 // printf("*");
23                 break;
24             }
25             counter++;
26         }
27         counter++;
28     }
29     printf("%d",counter);
30 }
31 int main(){
32     int n;
```

```
33 | scanf("%d",&n);
34 | func(n);}
35 |
```

	Input	Expected	Got	
✓	2	12	12	✓
✓	1000	5002	5002	✓
✓	143	717	717	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

[◀ Problem 1: Finding Complexity using Counter Method](#)

Jump to...

[Problem 3: Finding Complexity using Counter Method ▶](#)