

[Dashboard](#) / [My courses](#) / [CS23331-DAA-2023-CSE](#) / [Finding Time Complexity of Algorithms](#)
/ [Problem 2: Finding Complexity using Counter method](#)

Started on Friday, 9 August 2024, 2:13 PM

State Finished

Completed on Friday, 9 August 2024, 2:24 PM

Time taken 11 mins 32 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 int main()
3 {
4     int c=0;
5     int n;
6     scanf("%d",&n);
7     if(n==1)
8     {
9         c++;
10    }
```

```
10         //printf("*");
11         c++;
12     }
13     else
14     {
15         for(int i=1; i<=n; i++)
16         {
17             c++;
18             for(int j=1; j<=n; j++)
19             {
20                 c++;
21                 //printf("*");
22                 c++;
23                 //printf("*");
24                 c++;
25                 break;
26             }
27             c++;
28         }
29         c++;
30     }
31     c++;
32     printf("%d",c);
33 }
34 }
```

	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 ▶