



| Started on   | Wednesday, 20 August 2025, 3:53 PM        |
|--------------|---|
| State        | Finished                                  |
| Completed on | Wednesday, 20 August 2025, 4:01 PM        |
| Time taken   | 7 mins 17 secs                            |
| Marks        | 1.00/1.00                                 |
| Grade        | <b>10.00</b> out of 10.00 ( <b>100</b> %) |

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++)</pre>
       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.
A positive Integer n
Output:
Print the value of the counter variable
```

## Answer: (penalty regime: 0 %)

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

|       | Input      | Expected     | Got     |     |
|-------|------------|--------------|---------|-----|
| ~     | 2          | 12           | 12      | ~   |
| ~     | 1000       | 5002         | 5002    | ~   |
| ~     | 143        | 717          | 717     | ~   |
| Passe | ed all tes | sts! 🗸       |         |     |
| Corre |            | ubmission: 1 | 1.00/1. | 00. |

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