RAJALAKSHMI ENGINEERING COLLEGE

Started on	Saturday, 18 October 2025, 12:50 PM
State	Finished
Completed on	Saturday, 18 October 2025, 1:02 PM
Time taken	11 mins 24 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 %)

```
#include<stdio.h>

void func(int n)
{
    int c=0;
    if(n==1)
    {
        c++; // for printf("*")
      //printf("*");
    }
    else
    {
        c++; // for the else branch check
     for(int i=1; i<=n; i++)
     {
         c++;  // i-loop comparison
       for(int j=1; j<=n; j++)
       {
           c++; // j-loop comparison
          //printf("*");
          //printf("*");
          c+=2;
          break; // here j++ not executed so no c++ for j increment
       }
       c++;  // i- loop increment (after each iteration)
     }
     c++; // outer loop final comparison when it exits
   }
   printf("%d",c);
 }

int main(){
    int n;
    scanf("%d",&n);
    func(n);
```

```
36 }
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

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