

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  {
5      int c=0;
6      c++;
7      if(n==1)
8      {
9          printf("*");
10         c++;
11     }
12     else
13     {
14         c++;
15         for(int i=1; i<=n; i++)
16         {
17             c++;
18             c++;
19             c++;
20             for(int j=1; j<=n; j++)
21             {
22                 c++;
23                 c++;
24                 break;
25             }
26         }
27     }
28     printf("%d",c);
29 }
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.