Problem 2: Finding Complexity using Counter method

Started on	Sunday, 24 August 2025, 7:42 PM
State	Finished
Completed on	Sunday, 24 August 2025, 8:02 PM
Time taken	19 mins 28 secs
Marks	1.00/1.00
Grade	**10.00** out of 10.00 (**100**%)

Question 1 | Correct Mark 1.00 out of 1.00 Flag question

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 %)

```c
#include <stdio.h>
int count=0;
void func(int n){
    if(n==1){
        count++;
    }
    else{
        count++;
        for(int i=1;i<=n;i++){
            count++;
            count++;
            for(int j=1;j<=n;j++){
                count++;
                count++;
                break;

            }
```

```
18              count++;
19          }
20          count++;
21      }
22      printf("%d",count);
23  }
24  int main(){
25      int n;
26      scanf("%d",&n);
27      func(n);
28  }
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Finish review

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