Problem 2: Finding Complexity using Counter method

Started on	Monday, 18 August 2025, 12:56 AM
State	Finished
Completed on	Monday, 18 August 2025, 1:03 AM
Time taken	6 mins 54 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 func(int n){
    int counter=0;
    if(n==1){
        counter++;
        counter++;
        return counter;
    }
    else{
        for(int i=1;i<=n;i++){
            counter++;
            for(int j=1;j<=i;j++){
                counter++;
                counter++;
                counter++;
                counter++;
                break;
            }
        }
    }
    counter++;
    counter++;
    return counter;
}

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

	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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