Problem 2: Finding Complexity using Counter method

Started on	Thursday, 21 August 2025, 8:43 PM
State	Finished
Completed on	Thursday, 21 August 2025, 8:52 PM
Time taken	8 mins 59 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 main(void) {
    long long n, cnt = 0;
    if (scanf("%lld", &n) != 1) return 0;

    cnt++;
    if (n == 1) {
        cnt++;
    } else {
        long long i, j;
        for (i = 1; (cnt++, i <= n); i++) {
            for (j = (cnt++, 1); (cnt++, j <= n); j++) {
                cnt++;
                cnt++;
                break;
            }
        }
    }

    printf("%lld", cnt);
    return 0;
}
```

	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

Back to Course