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Started on	Thursday, 8 August 2024, 11:18 AM
State	Finished
Completed on	Thursday, 8 August 2024, 11:41 AM
Time taken	23 mins 1 sec
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 %)

```
1 #include<stdio.h>
2 int f(int n){
3     int c=0;
4     c++; //for if statement;
5     if(n==1){
6         /*printf("");*/c++;
7     }else{
8         for(int i=1; i<=n; i++){
9             for(int j=1; j<=n; j++){
10                //printf("");
11                c++;
12                //printf("");
13                c++;
14                c++; //lin
15                break;
16            }
17            c++; //lout
18            c++;
19        }
20    }
21    c++; //return st
22    return c;
23 }
24 int main(){
25     int n;
26     scanf("%d",&n);
27     printf("%d",f(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.

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