

# PROBLEM 2

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 Counter(int n){
3     int count=2;
4     if(n==1){
5         //count++;
6     }
7     else{
8         for(int i=1;i<=n;i++){
9             count++;
10            for(int j=1;j<=n;j++){
11                count++;
12                count++;
13                count++;
14                count++;break;
15            }
16        }
17    }
18    return count;
19 }
20 int main(){
21     int a;
22     scanf("%d",&a);
23     int b=Counter(a);
24     printf("%d",b);
25 }
26
27
28
```

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

Passed all tests! ✓