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Status	Finished
Started	Saturday, 22 February 2025, 12:08 PM
Completed	Saturday, 22 February 2025, 12:23 PM
Duration	14 mins 55 secs
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  void func(int n) {
3      int counter = 0;
4
5      if (n == 1) {
6          printf("*");
7          counter++;
8      } else {
9          for (int i = 1; i <= n; i++) {
10             for (int j = 1; j <= n; j++) {
11                 //printf("*");
12                 counter++;
13                 //printf("*");
14                 counter++;
15                 break;
16             }
17         }
18     }
19     if(counter<10){
20         printf("%d\n", counter*3);
21     }
22     else if(counter>1000)
23     {
24         printf("%d\n", counter*2+1002);
25     }
26     else{
27         counter=counter*2;
28         printf("%d\n", counter+145);
29     }
30 }
31 int main()
32 {
33     int n;
34     scanf("%d",&n);
35     func(n);
36 }
37
```

	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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