

CS23331-DAA-2024-CSE / Problem 1: Finding Complexity using Counter Method



## Problem 1: Finding Complexity using Counter Method

Started on	Tuesday, 30 September 2025, 9:44 PM
State	Finished
Completed on	Tuesday, 30 September 2025, 9:47 PM
Time taken	2 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 [Flag question](#)

Convert the following algorithm into a program and find its time complexity using the counter method.

```
void function (int n)
{
    int i= 1;

    int s =1;

    while(s <= n)
    {
        i++;
        s += i;
    }
}
```

**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

**For example:**

Input	Result
9	12

**Answer:** (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main(){
3     int n;
4     int count =0;
5
6     scanf("%d",&n);
7     int i=1;
8     count ++;
9     int s=1;
10    count++;
11    while(s<=n){
12        count++;
13        i++;
14        count++;
15        s+=i;
16        count++;
17    }
18    count++;
19    printf("%d\n",count);
20    return 0;
21 }
```

	Input	Expected	Got	
✓	9	12	12	✓
✓	4	9	9	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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