

**Started on** Monday, 11 August 2025, 3:23 PM

**State** Finished

**Completed on** Monday, 11 August 2025, 3:31 PM

**Time taken** 8 mins 25 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 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 %)

Reset answer

```

1 #include<stdio.h>
2
3 void function (int n){
4     int c=0;
5     int i=1;
6     c++;
7     int s=1;
8     c++;
9     while(s<=n)
10    {
11         c++;
12         i++;
13         c++;
14         s+=i;
15         c++;
16     }
17     c++;
18     printf("%d",c);
19 }
20 int main()
21 {
22     int n;
23     scanf("%d",&n);
24     function(n);
25 }
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.