

Started on Thursday, 31 July 2025, 8:18 AM

State Finished

Completed on Thursday, 31 July 2025, 8:28 AM

Time taken 10 mins

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 void function(int);
3 int main()
4 {
5     int n;
6     scanf("%d",&n);
7     function(n);
8 }
9 void function(int n)
10 {
11     int count=0;
12     int i=1;
13     count++;
14     int s=1;
15     count++;
16     while(s<=n)
17     {
18         count++;
19         i++;
20         count++;
21         s+=i;
22         count++;
23     }
24     count++;
25     printf("%d",count);
26 }
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.