

Started on Thursday, 31 July 2025, 8:17 AM

State Finished

Completed on Thursday, 31 July 2025, 8:29 AM

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

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.