



J2

Started on Monday, 18 August 2025, 9:09 AM

State Finished

Completed on Monday, 18 August 2025, 9:30 AM

Time taken 20 mins 45 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 %)

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

	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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