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Started on	Friday, 9 August 2024, 1:53 PM
State	Finished
Completed on	Friday, 9 August 2024, 2:03 PM
Time taken	10 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 %)

```
1 #include<stdio.h>
2
3 void function (int n)
4 {
5     int c=0;
6     int i= 1;
7     c++;
8     int s =1;
9     c++;
10    while(s <= n)
11    {
12        c++;
13        i++;
14        c++;
15        s += i;
16        c++;
17    }
18    c++;
19    printf("%d",c);
20 }
21
22 int main(){
23     int n;
24     scanf("%d",&n);
25     function(n);
26 }
27
```

	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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[Problem 2: Finding Complexity using Counter method ►](#)