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Started on Friday, 9 August 2024, 2:07 PM

State Finished

Completed on Friday, 9 August 2024, 2:12 PM

Time taken 4 mins 48 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 int main()
3 {
4     int c=0;
5     int n;
6     scanf("%d",&n);
7     int i=1;
8     c++;
9     int s=1;
10    c++;
```

```
11 while(s<=n)
12 {
13     c++;
14     i++;
15     c++;
16     s+=i;
17     c++;
18 }
19 c++;
20 printf("%d",c);
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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Problem 2: Finding Complexity using Counter method ▶