

Started on Thursday, 31 July 2025, 8:47 AM

State Finished

Completed on Thursday, 31 July 2025, 8:56 AM

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

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.