

[Dashbo...](#) / [My cour...](#) / [CS23331-DAA-2023-...](#) / [Finding Time Complexity of Algorit...](#) / [Problem 1: Finding Complexity using Counter Me...](#)

Started on	Tuesday, 20 August 2024, 2:13 PM
State	Finished
Completed on	Tuesday, 20 August 2024, 2:31 PM
Time taken	18 mins 36 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      count++;
6      int s =1;
7      count++;
8      while(s <= n)
9      {count++;
10         i++;
11         count++;
12         s += i;
13         count++;
14     }
15     count++;
16     printf("%d",count);
17 }
18 int main()
19 {
20     int n;
21     scanf("%d",&n);
22     function(n);
23 }
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

◀ BASIC C PROGRAMMING-PRACTICE

Jump to...

Problem 2: Finding Complexity using Counter method ▶