

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

Started on	Friday, 9 August 2024, 2:44 PM
State	Finished
Completed on	Friday, 9 August 2024, 2:47 PM
Time taken	3 mins 32 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  {
4      int c=0;
5      int i=1;
6      c++;
7      int s =1;
8      c++;
9      while(s <= n)
10 {
11     c++;
12     i++;
13     c++;
14     s +=i;
15     c++;
16 }
17 c++;
18 printf("%d",c);
19 }
20 int main()
21 {
22     int n;
23     scanf("%d",&n);
24     function(n);
25 }
26
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Jump to...

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