## Dashboa... / My cour... / CS23331-DAA-2023-... / Finding Time Complexity of Algorit... / Problem 1: Finding Complexity using Counter Met...

Status	Finished
Started	Saturday, 22 February 2025, 12:00 PM
Completed	Saturday, 22 February 2025, 12:07 PM
Duration	7 mins 3 secs
Marks	1.00/1.00
	40.00 (40.00 (40.00)

**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;</pre>
```

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 %)

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