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

Started on	Saturday, 14 September 2024, 9:05 AM
State	Finished
Completed on	Saturday, 14 September 2024, 9:09 AM
Time taken	3 mins 53 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</pre>
```

For example:

Input	Result	
9	12	

Answer: (penalty regime: 0 %)

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

		Input	Expected	Got	
ľ	~	9	12	12	~
ľ	~	4	9	9	~

Passed all tests! 🗸

Correct

Marks for this submission: 1.00/1.00.

Jump to...

Problem 2: Finding Complexity using Counter method ►