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

Started on	Friday, 4 October 2024, 2:05 PM
State	Finished
Completed on	Friday, 4 October 2024, 2:05 PM
Time taken	46 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++;</pre>
```

}
Note: No need of counter increment for declarations and scanf() and count variable printf() statements.

Input:

A positive Integer n

s += i;

Output:

Print the value of the counter variable

For example:

Input	Result	
9	12	

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
 1
 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)</pre>
10
         {
11
             C++;
12
             i++;
13
             C++;
14
             s += i;
15
             C++;
16
        }
17
        C++;
        printf("%d",c);
18
19
20
   int main()
21 🔻 {
22
         int n;
         scanf("%d",&n);
23
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.

Jump to...

Problem 2: Finding Complexity using Counter method ►