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

Started on	Tuesday, 13 August 2024, 2:47 PM
State	Finished
Completed on	Tuesday, 13 August 2024, 2:49 PM
Time taken	2 mins 35 secs
Marks	1.00/1.00
Grade	<b>10.00</b> out of 10.00 ( <b>100</b> %)

```
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
 4
 5 v int main() {
 6
 7
      int n;
 8
9
      scanf("%d", &n);
10
11
      int i = 1;
12
13
      int s = 1;
14
15
      int counter = 2;
16
17
      while (s <= n) \{
18
19
         i++;
20
21
         s += i;
22
23
         counter+=3;
24
25
26
27
      counter++;
28
      printf("%d\n", counter);
29
30
31
32
33
      return 0;
34
35 }
```

	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 ►