Started on	Tuesday, 13 August 2024, 2:07 PM
State	Finished
Completed on	Tuesday, 13 August 2024, 2:22 PM
Time taken	15 mins 10 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 %)

```
#include <stdio.h>

void function(int n) {
    int counter=0;
    int i = 1; counter++;
    int s = 1; counter++;

    while (s <= n) {
        counter++;
        i++; counter++;
        s += i; counter++;
    }counter++;

    printf("%d",counter);
}

int main() {
    int n;
    scanf("%d", &n);
    function(n);
    return 0;
}
```

	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 ►