Started on	Thursday, 8 August 2024, 10:45 AM
State	Finished
Completed on	Thursday, 8 August 2024, 11:15 AM
Time taken	30 mins
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>
int main(){
    int n;//0 for declaration
    int count=0;// not part of problem
    scanf("%d",&n);
    int i= 1;
    count++;//+1 for initialiation
    int s =1;
    count++;//+1 for initialiation
    while(s<=n){
        i++;count++;
        s+=i;count++;
        count++;
     }
     count++;//false conditoon of loop
     printf("%d",count);
}
```

	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 ►