Problem 1: Finding Complexity using Counter Method

Started on	Friday, 22 August 2025, 2:04 PM
State	Finished
Completed on	Friday, 22 August 2025, 2:44 PM
Time taken	40 mins 4 secs
Marks	1.00/1.00
Grade	**10.00** out of 10.00 (**100**%)

Question 1 | Correct Mark 1.00 out of 1.00 Flag question

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 %)

```c
#include <stdio.h>
int count=0;
void func(int a){
    int s=1;
    count++;
    int i=1;
    count++;
    while(s<=a){
        count++;
        i++;
        s+=i;
        count++;
        count++;
    }
    count++;
    printf("%d",count);
}
int main(){
    int a;
    scanf("%d",&a);
    func(a);
```

```
    count++;
}
```

	Input	Expected	Got	
✔	9	12	12	✔
✔	4	9	9	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Finish review

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