RAJALAKSHMI ENGINEERING COLLEGE

THIVYASRI T 2024-CSE

T2

Started on	Monday, 18 August 2025, 7:41 AM
State	Finished
Completed on	Monday, 18 August 2025, 8:24 AM
Time taken	43 mins 19 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>

int main(){
    int n;
    scanf("%d",&n);
    int i=1,s=1;
    int counter=0;
    counter=2;
    while (s<=n){
        counter++;
        i++;
        counter++;
        s+=i;
        counter++;
    }
    counter++;
    printf("%d\n",counter);
    return 0;
}
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

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