RAJALAKSHMI ENGINEERING COLLEGE

Started on	Friday, 1 August 2025, 2:23 PM
State	Finished
Completed on	Friday, 1 August 2025, 2:26 PM
Time taken	3 mins 25 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 counter = 0;
    int n ;
    scanf("%d", &n);
    counter++;
    int i = 1;
    counter++;
    int s = 1;
    counter++;
    while(s<=n){
        counter++;
        i++;
        counter++;
        s += i;
        counter++;
    }
    printf("%d", counter);
}
```

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

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Back to Course