



Started on	Thursday, 21 August 2025, 10:28 AM
State	Finished
Completed on	Thursday, 21 August 2025, 10:43 AM
Time taken	15 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 %)

```

1  #include<stdio.h>
2  int main(){
3      int n;
4      int count=0;
5      scanf("%d",&n);
6      int i=1;
7      count++;
8      int s=1;
9      count++;
10 while(s<=n){
11     count++;
12     i++;
13     count++;
14     s+=i;
15     count++;
16 }
17
18 count++;
19 printf("%d\n",count);
20
21 }
```

	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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