
Started on Wednesday, 13 August 2025, 10:13 AM

State Finished

Completed on Wednesday, 13 August 2025, 10:17 AM

Time taken 3 mins 58 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 c=0;
3
4 void function (int n)
5 {
6     int i= 1;
7     c++;
8     int s =1;
9     c++;
10    while(s <= n)
11    {
12        c++;
13        i++;
14        c++;
15
16        s += i;
17        c++;
18    }
19 }
20 int main(){
21     int n;
22     scanf("%d",&n);
23     c=0;
24     function(n);
25     printf("%d\n",c+1);
26     return 0;
27 }
```

	Input	Expected	Got	
✓	9	12	12	✓
✓	4	9	9	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

[Back to Course](#)