
Started on Monday, 4 August 2025, 3:18 PM

State Finished

Completed on Monday, 4 August 2025, 3:42 PM

Time taken 24 mins 16 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 %)

Reset answer

```
1  #include<stdio.h>
2  void function(int);
3  int count=0;
4  int main()
5  {
6      int n;
7      scanf("%d",&n);
8      function(n);
9      printf("%d",count);
10 }
11 void function (int n)
12 {
13     int i=1;
14     count++;
15     int s=1;
16     count++;
17     while(s<=n)
18     {
19         count++;
20         i++;
21         count++;
22         s+=i;
23         count++;
24     }
25     count++;
26 }
27
```

	Input	Expected	Got	
✓	9	12	12	✓

	Input	Expected	Got	
✓	4	9	9	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.