

KARTHIK J 2024-IT ▾

K2

Started on Wednesday, 30 July 2025, 1:51 PM**State** Finished**Completed on** Wednesday, 30 July 2025, 1:58 PM**Time taken** 6 mins 56 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
3 void function(int n)
4 {
5     int i= 1;
6     int s =1;
7     while(s <= n)
8     {
9         i++;
10        s += i;
11    }
12    printf("%d",3* i);
13 }
14 int main()
15 {
16     int n;
17     scanf("%d",&n);
18     function(n);
19 }
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

[Back to Course](#)