

# CS23331-Design and Analysis of Algorithms-2023 Batch-CS

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## Quiz navigation



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Status	Finished
Started	Sunday, 23 February 2025, 4:08 PM
Completed	Sunday, 23 February 2025, 4:21 PM
Duration	13 mins 1 sec
Marks	1.00/1.00
Grade	10.00 out of 10.00 (100%)

Question 1

Correct

Mark 1.00 out of 1.00

Flag question

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

	Input	Expected	Got
	9	12	12
	4	9	9

Passed all tests!

Correct

Marks for this submission: 1.00/1.00.

Finish review

← BASIC C PROGRAMMING-PRACTICE

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Problem 2: Finding Complexity using Counter method ▶