

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

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.