

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

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