Week 07 : Programming Assignment 2

Due on 2025-03-13, 23:59 IST

Implement a Simple Counter

A `Counter` class is provided. Implement:

- A constructor initializing the counter to zero.
- Methods to `increment()`, `decrement()`, and `getValue()`.
- Ensure the counter does not go below zero.

Private Test cases used for evaluation	Input	Expected Output	Actual Output	Status
Test Case 1		1	1\n	Passed

The due date for submitting this assignment has passed.
1 out of 1 tests passed.
You scored 100.0/100.

Assignment submitted on 2025-03-06, 13:27 IST

Your last recorded submission was :

```java
import java.util.Scanner;

class Counter {
    private int count;
void increment(){
count++;
}
void decrement(){
count--;
  if(count < 0){
    count = 0;
  }
}

int getValue(){
  return count;
}
}
public class W07_2 {
    public static void main(String[] args) {
        Counter counter = new Counter();
        counter.increment();
        counter.increment();
        counter.decrement();
        System.out.println(counter.getValue()); // Output: 1
    }
}
```

Sample solutions (Provided by instructor)

```java
import java.util.Scanner;

class Counter {
    private int count;
// Constructor to initialize counter to zero
    public Counter() {
        this.count = 0;
    }

    // Method to increment the counter
    public void increment() {
        count++;
    }

    // Method to decrement the counter (ensuring it doesn't go below zero)
    public void decrement() {
        if (count > 0) {
            count--;
        }
    }

    // Method to get the current value of the counter
    public int getValue() {
        return count;
    }
}
public class W07_2 {
    public static void main(String[] args) {
        Counter counter = new Counter();
        counter.increment();
        counter.increment();
        counter.decrement();
        System.out.println(counter.getValue()); // Output: 1
    }
}
```