

Problem 1: main class is problemA.java located in com.mrm.org.problemSet (src/main/java)

Sample input is: "dog", "dog", "dog" -> but since it is treated as Strng in java I provided the escape characters thus it will be like this: String input = "\"dog\", \"dog\", \"dog\"";

(every " will be replaced by \") Test result in eclipse:



```
import static org.junit.Assert.*;

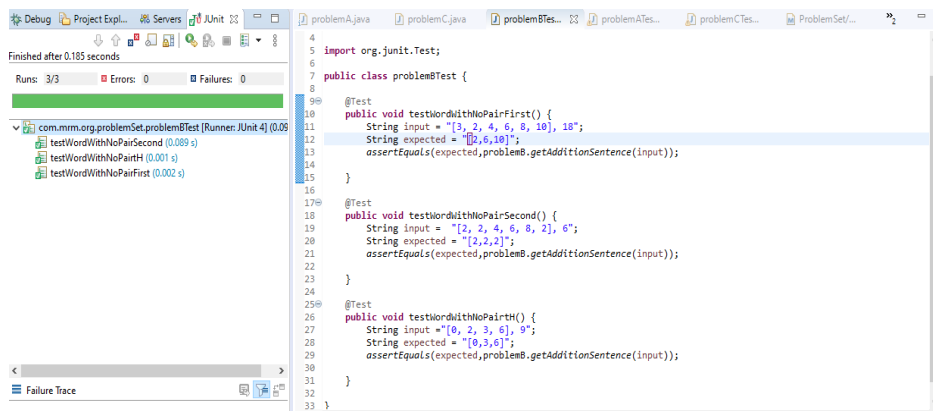
public class problemATest {

    @Test
    public void testWordWithNoPairFirst() {
        String input = "\"dog\", \"dog\", \"dog\"";
        String expected = "\"dog\"";
        assertEquals(expected, problemA.wordWithNoPair(input));
    }

    @Test
    public void testWordWithNoPairSecond() {
        String input = "\"dog\", \"cat\", \"dog\", \"cow\", \"cat\"";
        String expected = "\"cow\"";
        assertEquals(expected, problemA.wordWithNoPair(input));
    }

    @Test
    public void testWordWithNoPairH() {
        String input = "\"dog\", \"dog\", \"cat\", \"cat\", \"cat\", \"cat\"";
        String expected = "\"dog\"";
        assertEquals(expected, problemA.wordWithNoPair(input));
    }
}
```

Problem 2: main class is problemB/java located in com.mrm.org.problemSet (src/main/java)



```
import org.junit.Test;

public class problemBTest {

    @Test
    public void testWordWithNoPairFirst() {
        String input = "[3, 2, 4, 6, 8, 10], 18";
        String expected = "[2, 6, 10]";
        assertEquals(expected, problemB.getAdditionSentence(input));
    }

    @Test
    public void testWordWithNoPairSecond() {
        String input = "[2, 2, 4, 6, 8, 2], 6";
        String expected = "[2, 2, 2]";
        assertEquals(expected, problemB.getAdditionSentence(input));
    }

    @Test
    public void testWordWithNoPairH() {
        String input = "[0, 2, 3, 6], 9";
        String expected = "[0, 3, 6]";
        assertEquals(expected, problemB.getAdditionSentence(input));
    }
}
```

Test case 1 for problem 2 in pdf file:

This is the expected output:

Input: [3, 2, 4, 6, 8, 10], 18 à Output: [4,6,8]

Note: outputs 4, 6 and 8 because $4 + 6 + 8 = 18$

There could be more than 1 out put first is [4,6,8]

And second is [2,6,10] -> this is my output for now since this is the first match (lesser complexity and more efficient too) Let me know if you are okay with this one. Otherwise, I'll change the ouput to [4,6,80 or I'll output both.

Test Result executed via command line for problem A, B and C:

```
-----  
T E S T S  
-----  
Running com.mrm.org.problemSet.problemATest  
Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.109 sec  
Running com.mrm.org.problemSet.problemBTest  
Tests run: 3, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.015 sec  
Running com.mrm.org.problemSet.problemCTest  
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0 sec  
  
Results :  
  
Tests run: 7, Failures: 0, Errors: 0, Skipped: 0  
  
[INFO] -----  
[INFO] BUILD SUCCESS  
[INFO] -----  
[INFO] Total time: 9.347 s  
[INFO] Finished at: 2020-11-27T08:26:18+08:00  
[INFO] -----  
  
C:\Users\Computer\ProblemSet>mvn clean test
```