

## TestNotes/pset1/LowestGrade.java

```
1 // LowestGrade.java
2
3 /**
4  * PSET1: Exercise 6
5  * Iterative method that removes lowest grade in an array.
6  *
7  * @author Kuljit Takhar
8  * @version Last modified 15_Sept_2023
9  *
10 */
11
12 public class LowestGrade {
13     public static void main(String[] args) {
14         int[] a = removeLowest(23, 90, 47, 55, 88);
15         int[] b = removeLowest(85);
16         int[] c = removeLowest();
17         int[] d = removeLowest(59, 92, 93, 47, 88, 47);
18
19         System.out.println("a = " + arrayPrint(a));
20         System.out.println("b = " + arrayPrint(b));
21         System.out.println("c = " + arrayPrint(c));
22         System.out.println("d = " + arrayPrint(d));
23     }
24
25     public static int[] removeLowest(int... scores) {
26         if (scores.length == 0) {
27             return new int[0];
28         }
29
30         int lowest = scores[0];
31         int count = 1;
32
33         for (int i = 1; i < scores.length; i++) {
34             if (scores[i] < lowest) {
35                 lowest = scores[i];
36             } else if (scores[i] > lowest) {
37                 count++;
38             }
39         }
40
41         int[] result = new int[count];
42         int index = 0;
43
44         for (int score : scores) {
45             if (score != lowest) {
46                 result[index] = score;
47                 index++;
48             }
49         }
50         return result;
51     }
52
53     public static String arrayPrint(int[] arr) {
```

```
54     if (arr.length == 0) {
55         return "[]";
56     }
57
58     StringBuilder sb = new StringBuilder("[");
59     for (int i = 0; i < arr.length - 1; i++) {
60         sb.append(arr[i]).append(", ");
61     }
62     sb.append(arr[arr.length - 1]).append("]");
63     return sb.toString();
64 }
65 }
66
```