For the unit and test classes I will use a top-down approach to troubleshoot the problems encountered. I will run the code and see what errors I see and will read from the top-down and use the debug utility to help resolve the errors found. I will also make sure to document any errors found and the solution. I feel this is the best approach in these cases.

**Test Log Sheets Number: 3**

Tester: Program:

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| --- | --- | --- | --- | --- | --- |
| **Test Case**  **Method getHighest** | **Strategy** | **Input** | **Expected Result** | **Actual Result** | **Comments** |
| 1 | Checking Array / Finding Max | 3,12,24,16,3,11,3 | Max is 24 | The max is 0 | If (array1[i] < max) wont select that highest number as it should be a greater than sign. Code changed to ‘if (array1[i] > max ) |
| 2 | Checking Array / Finding Max | 3,12,24,16,3,11,3 | Max is 24 | Max is 24 | Pass |
| 3 | Checking Array / Finding Max | -1,5,7,15,100,21,31 | Max is 100 | Max is 100 | Pass |
| 4 | Checking Array / Finding Max | 0,2,4,-100,5 | Max is 5 | Max is 4 | The line ‘**for** (**int** i = 0; i<array1.length-1; i++)’ is causing the loop to stop one value before the end of the array. So the ‘-1’ part of the code needs removed. |
| 5 | Checking Array / Finding Max | 0,2,4,-100,5 | Max is 5 | Max is 5 | Pass |
| 6 | Checking Array / Finding Max | 3,2,4,5,5,4,9 | Max is 9 | Max is 9 | Pass |
| 7 | Checking Array / Finding Max | 4,3,9,2 | Max is 9 | Max is 9 | Pass |
| 8 | Checking Array / Finding Max | 1,4 | Max is 4 | Max is 4 | Pass |
| 9 | Checking Array / Finding Max | 1,15,200,13 | Max is 200 | Max is 200 | Pass |
| 10 | Checking Array / Finding Max | 10,2,-100,5,8 | Max is 10 | Max is 10 | Pass |

**Test Log Sheets Number: 4**

Tester: Program:

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| --- | --- | --- | --- | --- | --- |
| **Test Case**  **Method GetLowest** | **Strategy** | **Input** | **Expected Result** | **Actual Result** | **Comments** |
| 1 | Checking Array /Finding Min | 3,12,24,16,3,11,3 | Min is 3 | Exception error | The line ‘**for** (**int** i = 0; i<=array1.length; i++)’ should not have the equal sign as it will cause an exception. It is removed for next test. |
| 2 | Checking Array /Finding Min | 3,12,24,16,3,11,3 | Min is 3 | Max is 0 | No number is being displayed but the code in GetLowest is “the max is” and should be “the min is” which will be changed for the next test. |
| 3 | Checking Array /Finding Min | 3,12,24,16,3,11,3 | Min is 3 | Min is 0 | The min isnt being updated as it is being set to 0 and the test data doesn’t go below that. The ‘int min = 0;’ will be changed to ‘int min = array1[0];’ so that sets the min to the first item in the array. |
| 4 | Checking Array /Finding Min | 3,12,24,16,3,11,3 | Min is 3 | Min is 3 | Pass |
| 5 | Checking Array /Finding Min | 5,200,-3,12 | Min is -3 | Min is -3 | Pass |
| 6 | Checking Array /Finding Min | 12,500,-100,0 | Min is -100 | Min -100 | Pass |
| 7 | Checking Array /Finding Min | 10000,2,-10,2 | Min is -10 | Min is -10 | Pass |
| 8 | Checking Array /Finding Min | A,2,-10,2 | Error | Error | Pass |
| 9 | Checking Array /Finding Min | 1,101 | Min is 1 | Min is 1 | Pass |
| 10 | Checking Array /Finding Min | 5,10,3248,-100,2 | Min is -100 | Min is -100 | Pass |