**Test Results**

**Code: 9494  
Test Plan: 8827**

Since the test plan didn’t specify certain inputs or expected outputs, as a tester I entered my own values to match each test case objective.

* **Test Case 1**

Identifier: testPostition

Objective: Test to see if you can set and get elements of matrix

Criticality: high

**Input:** Table 4 X 4 in txt file

1 3 4 9

2 8 6 7

1 2 7 9

8 3 4 5

**Expected Result:**

1. Check if table is sorted - Return False
2. Sort Table
3. Print Sorted Table:   
   1 2 4 7   
   1 3 4 5   
   2 3 6 9   
   8 8 7 9
4. Is Sorted - Return True

**Actual Result:**

1. Check if table is sorted - Printed to console: True
2. Sort Table
3. Print Sorted Table:   
   1 2 4 7   
   1 3 4 5   
   2 3 6 9   
   8 8 7 9
4. Is Sorted - Return True

**Test Pass/Fail:** PASS  
 The program is able to set and get elements of the matrix.

* **Test Case 2**

Identifier: testSorted

Objective: Test to see if the sort algorithm is correct

Criticality: high

**Input:** Table 4 X 4 in txt file

1 3 4 9

2 8 6 7

1 2 7 9

8 3 4 5

**Expected Result:**

1. Check if table is sorted - Return False
2. Sort Table
3. Print Sorted Table:   
   1 2 4 7   
   1 3 4 5   
   2 3 6 9   
   8 8 7 9
4. Is Sorted - Return True

**Actual Result:**

1. Check if table is sorted - Printed to console: True
2. Sort Table
3. Print Sorted Table:   
   1 2 4 7   
   1 3 4 5   
   2 3 6 9   
   8 8 7 9
4. Is Sorted - Return True

**Test Pass/Fail:** PASS  
 The sorting algorithm is correct.

* **Test Case 3**

Identifier: testBound

Objective: Test to see if indexes are out of bounds of the matrix

Criticality: high

**Input:** Table 4 X 5 in txt file

1 3 4 9 2

2 8 6 7 3

1 2 7 9 4

8 3 4 5 1

**Expected Result:**

1. Handle exception
2. Print to console: ERROR!: Input must be square.

**Actual Result:**

1. Exception in thread "main" [[I@33909752]

ERROR!: Input must be square.

java.lang.Exception

**Test Pass/Fail:** Fail  
 The program displays that the input must be square, but it’s not handling the exception.

* **Test Case 4**

Identifier: testLeftandRight

Objective: Test left and right indexes to see if they are in order

Criticality: high

**Input:** Table 6 X 6 in txt file

1 2 3 4 5 6

2 3 4 5 6 7

3 4 5 6 7 8

4 5 6 7 8 9

5 6 7 8 9 10

6 7 8 9 10 11

**Expected Result:**

1. Check if table is sorted - Return True
2. Exit Program

**Actual Result:**

1. Check if table is sorted - Printed to console: True
2. Called Sort Table
3. Printed Sorted Table:   
   1 2 3 4 5 6

2 3 4 5 6 7

3 4 5 6 7 8

4 5 6 7 8 9

6 7 8 9 10

6 7 8 9 10 11   
Check if table is sorted - Return True

**Test Pass/Fail:** Fail  
 The sorting algorithm should not be executed if the table is already sorted.