

6174 Test Plan Review

This test plan was reviewed against code 7305. The test plan starts out by explaining what is considered “sorted in the prompt” and gives a visual example. It then proceeds to give me the test cases as well as a code segment I could include within the code to run the aforementioned tests. This code segment allows me to import the Table from a text file and contains two portions; the first portion tests the isSorted method and prints the resulting Boolean and the second portion performs the sortable method and prints out the array.

Upon attempting to implement this code, there was an initial issue with the methods found within the TableSorter class from the code as the code’s creator did not make the isSorted method static, disallowing it to be utilized without being instantiated into an object first. I was able to remediate this issue by extending the test code snippet and adding in a TableSorter object.

The test code input was easy to understand and also helped me realize that arrays can be read from a single line, a possibility I assumed wasn’t possible when I made my code. The results for the test cases are given in the following sections, separated by what method the test cases were done on.

isSorted Test Cases

All the test cases for isSorted passed resulted in the expected output when given a specific input. Within the basic tests, I had no issue setting up the tests but would have liked if their purpose was explained a little further. That said, the reasoning behind the tests can be understood without too much effort. Within the edge case tests, I don’t believe the positioning of a maximized/minimized integer would matter so I think the number of test cases could have been shrunk further within this category.

The final test case in this set seemed to have a justification that didn't match the input array that was given. Lastly, for special cases: there was a test case that was represented already in a previous section. Besides what I mentioned above, all the tests seemed reasonable and served well to ensure that the program functioned correctly.

Sortable Test Cases

All the test cases for sortable passed, resulting in a printed out sorted array after the program finished. In the basic tests I had no issue running them but, again, felt that the justification could have been further fleshed out. The edge case tests were sensibly minimized but perhaps too minimized as in this portion I felt they could have checked for the first/last row/column values rather than just the first and last value of the input. The special cases were well done and seem to account for a sensible range of special scenarios.

Conclusion

In conclusion: I believe this test suite worked well with the arbitrary code that I was assigned to test it, and served to ensure that the functionality of the program worked as intended. I had no issues testing the code, besides the workaround with `isSorted` previously mentioned, and I understood how these tests ensure the correctness of the program. If there was one thing I could add this this Test Plan it would be diversifying the sizes of table in the test cases by changing a few of the 3x3 arrays to be 1x1, 2x2, 4x4 and perhaps even a 2147483647x2147483647 array.