Augmentation:

1. We implemented a BandMatrix class as well as the SparseMatrix class. This was done to illustrate our factory subscription design in regard to how we perform cascading isValid tests when deciding how to store a sparse matrix. For instance, if a sparse matrix is found to be banded in nature, it will be automatically compressed into our 2d band-matrix storage array.

No deviations known.

We have a suite of unit tests that we implemented whilst implementing the sparse matrix library. The tests provide basic checks to ensure that expected functionality exists and persists. The test files are as follows:

|  |  |
| --- | --- |
| test\_band | Test suite for band\_matrix |
| test\_band\_matrix\_factory | Test suite for band\_matrix\_factory |
| test\_sparse\_matrix | Test suite for sparse\_matrix |
| test\_sparse\_matrix\_factory | Test suite for sparse\_matrix\_factory |

If the contracts are followed correctly, there are no known errors, faults, defects, or missing functionality.