

I first wrote tests for `GraphEdge` first, then `GraphNode`, then `Graph`. For all classes, I first tested their constructors and observer functions if they have any. Because I wanted to optimize lexicographically printing node names and outgoing edges in my design, I wrote a lot of tests, including helper assertion functions, that make sure their override comparison functions work correctly, which are important for keeping `TreeSet` representation structures sorted. These functions include `compareTo`, `equals`, and `hashCode`. For `GraphNode`, I wrote tests for adding edges. For `Graph`, I wrote tests for adding both nodes and edges. Finally, I wrote tests for `GraphWrapper`'s `listNodes` and `listChildren` functions, where I make sure the strings are returned in lexicographical order by the iterator.

In terms of black box testing heuristics, I mainly used equivalence partitioning to compare `GraphEdge` and `GraphNode` objects. Two `GraphEdges` and `GraphNodes` are either equal or one comes before the other in their lexicographic ordering.

After finishing my implementation, I felt that my original tests are sufficient, since I didn't leave any function untested.