My approach is to test each method individually to verify that it functions as expected. I will ensure that all operations, including adding, removing, and checking nodes and edges, correctly modify or reflect the graph structure. Additionally, since NullPointerException is present in every method's throws clause, I will specifically test for null inputs to confirm that they are handled properly. These tests will help validate the correctness and robustness of the graph implementation.

After testing I added other methods such as testRemoveNodeWithEdges since I didn't have enough coverage and I needed to test multiple variables that fill the method. I also added getNodes() in the Graph.java since I originally didn't think of that which caused me to also add that in testing with listChildrenXML in testing also.