Test Bench Configuration:

1. We have verified the correct working of the code, by running the code with varying number of the peers, Initially we started with 7 peers, then with 5 and finally with 9 peers. We have also verified that when synchronous multiple leader election started topology is not confused and finally we ended up with single leader at the end.

2.We have verified that when a peer which sent a election message, doesn't get a reply within a time period(time-out), it will be the leader.(Since the higher peers doesn't exist)

3. We have checked whether a election is triggered in the absence of trader or when the trader goes down by killing the trader process.

4. We have made one design consideration where if the leader has completed certain amount of transaction. It will give up its leadership, and next leader election algorithm will be started by random seller or buyer.

5. We have also verified that new leader will go through the log information logged by the previous leader and will check if any unpending request are yet to be requested.

6. We have implemented lamport logical clock and we have verified that events are properly ordered as expected.

7. We have also verified that all the sellers are able to register their product with the elected leader. And once leader is down or we have to re-elect new leader, new leader should get all the information regarding the sellers either via registering their goods again with him or using logged information if in case old seller is a new leader and old leader has become the one of the seller.