

## TESTCASE DOCUMENTATION

For this milestone, we have three test cases against which we test our peer to peer network

**TEST CASE 1 :** In this test case we are assigning one peer to be buying fish. We are also assigning the other peer to be selling fish. Here, the buyer will only buy fish and no other commodity. Once the buyer finds a seller who is selling fish, he will keep buying one item of fish at a time. Once it completes buying one unit, it waits for a certain amount of time and then buys again. We have assigned a total of 5 items of fish to the seller initially. Once it runs out of fish to sell, it restocks back to 5 units. We check that after each transaction the number of fish in the inventory of the seller goes down by 1 and when it reaches 0, is restocked back to 5. We terminate the process after 30 seconds.

**TEST CASE 2 :** In this test case we assign one peer to be a seller of boar while the other peer is assigned to be a buyer of fish. The buyer keeps looking for fish to buy among its peers and does not find any. After waiting for a certain time it looks for fish to buy again. We ensure that no boar is sold by the seller. We terminate this process after 30 seconds.

**TEST CASE 3 :** In this test case, we randomly assign one peer to be a buyer and one peer to be a seller. The seller randomly selects an item to sell and is initially stocked with 5 quantities of said item. After it sells out all its stock of this item, the seller again randomly picks an item to sell and stocks itself with 5 quantities of the item. The buyer randomly selects one item to buy, and sends the lookup request. If it finds that item with the seller, it completes the transaction, waits for a period of time, and then randomly picks another item to buy. If it does not find the item it waits for a period of time and then continues the process.

We log all output of the test cases in separate testcase log files.