1. **Offline on Networking:**

In your previous offline you implemented a Fruitshop with three different Salesman. In this assignment, we will assume that the owner of the shop wants to monitor his shop and the salesmen from a remote place. Your assignment is to help him in this sceneaio.

In this assignment you will implement a class called LogMonitor. This class will receive log entries from each of the SalesmanThread thread via socket. For your assignment you will only use TCP socket.

You can follow the following steps to complete your assignment.

- Write a LogMonitor class. Inside its main function LogMonitor will try to accept socket connection from multiple SalesmanThread at any time.
- If a connection is successfully created, then for every connection start a thread that reads data from the socket.
- After receiving data from socket LogMonitor will perform the following operations.
  - Create a LogEntry object using data.
  - Print the LogEntry.
  - Send acknowledgement back to the SalesmanThread. Randomly send negative acknowledgement back to the SalesmanThread.
- Make appropriate changes to your SalesmanThread class so that it sends a LogEntry to LogMonitor using socket, every time a buy or sell operation is performed.
- After sending LogEntry SalesmanThread waits until it receives an acknowledgement. If the acknowledgement is positive then SalesmanThread contnues reading inputs. Otherwise it resends LogEntry until it receives a positive acknowledgement.
- To send a LogEntry over the socket you can follow any format you like but you must be able to create each LogEntry object inside LogMonitor from the data you receive.
- Print every LogEntry that LogMonitor receives. If you feel that you need synchronization you must take appropriate steps.
- Default port number for socket 3600.