**ODD Numbered Students**

1. A small-scale vegetable vendor wants to develop a system to manage his door-delivery service. The system should maintain the list of available vegetables for the day. The system should accept a list of vegetables with the individual quantities required by the customer and assign order numbers for tracking. The system should be able to generate the bill for the order and ensure that orders should be placed for more than Rs. 100/-. The system should confirm the payment through notifications to the customer and the vendor. Appending the order should be disabled after payment. The availability of the vegetables should be updated to the vendor and the customer (during ordering). When the order is ready, a notification should be sent to the customer mentioning the tentative time of delivery. Use appropriate patterns to list the items eligible for door delivery. Demonstrate the unit testing for the given scenario. Implement multiple threading to do the work of the ordering and delivery work in parallel.

**Even Numbered Students**

1. A hotel wants to develop a table reservation system for their clients to avoid unnecessary waiting. The number of tables and seats per table should be displayed to the clients. The system should be able to automatically reserve a table based on the number of seats required. The booking notifications should be sent to the client and the hotel manager. When a customer pays off his bill, the status of that table should change from occupied to available. The system should periodically refresh and display the new availability. A notification has to be made for the appropriate persons about the status of the reservation. Demonstrate the unit testing for the given scenario. Implement multiple threading to do the work of the reservation and bill payment work in parallel.