START=>

1. Read from seller file into seller\_info structure (including items from item\_file)

2. Read from customer\_file into customer\_info (Location needs to be accessed from location\_file)

=>Run the floyd warshall algortihm and store the new matrix.

3. Populate the authentication\_structure by reading from customer\_file

4. Give option to register a new customer else login with existing customer or exit

5. Choose n no. of customers randomly. n= rand();

6. Authenticate by reading username n password from customer\_info file

=> View the list of m items of n no. of sellers and sort it in 1/3 ways

=>Price Low to High => Merge Sort

=>Price High to Low => Merge Sort

=>Popularity

7. Make some randome purchases from seller file and item file

Pick a random seller\_ID and item\_ID and push into cart stack

Data of cart => Seller\_ID, Item\_ID, Cost, Discount

8. Check out after some n random no. of purchases

9 Add the cost of the items in cart, apply appropriate discounts, add taxes, increment the popularity variable accordingly.

10. Take speed of delivery option from the customer randomly .use rand function to choose 0/1/2 {Normal, Fast, One-Day} Add delivery cost to the total

11. Display the GRAND TOTAL and messaage that your product will be delivered at earliest. THANK YOU

12.Pop the stack and fill it in the Purchase\_Table and generate a unique hash for the Purchase

13.Calculate the priority- Take speed of delivery and distance from new matrix and assign priority

14. Enqueue the item in respective sellers queue according to priority, store the priority in Purchase\_Table under respective hash code

Fill the History file with Purchase\_Table items

15. GOTO step 4

16. If chosen exit in step-4 then dequeue all the sellers queues and display delivered for each Customer\_ID Item\_ID Seller\_ID

17. PLATFORM CLOSED