**E Commerce Platform should have the following functionalities:**

1. A file (.txt) capable of dynamic updation of seller and items for sale. => named as => **SELLER FILES**

The parameters of information need to be decided

\*\* We can create multiple files if necessary

2. Read the seller information from this file when the customer requests or searches for a product

and display the information

"Sort Products By" features of

a. Price HIGH to LOW

b. Price LOW to HIGH

c. Most Popular & any other options can be given [ WILL USE SWITCH CASE for this ]

3. "**Add to Cart**" option for adding items to cart, once the customer finishes shopping "**Check Out**" Option should be given

We need to use a file for maintaining the status of the customers cart. => **CART file**

4. Read from the CART file and ask the user to **Register** or **Login** if already a user

5. AUTHENTICATION Functionality to be given =>

A> If Register =? Ask for the various attributes like

FIRST NAME

LAST NAME

MOBILE NO.

USERNAME

PASSWORD

and store in => **AUTHENTICATION FILE** and create a new file for every user to store their purchase history

B> If Login =? Ask to enter

USERNAME

PASSWORD

and call **authenticate function**, and **return 0** (if login invalid and ask user to try again GOTO Step 4) or **return 1** (if login authenticated)

6. Assuming that the login has been validated, create a new hash in a hash table data structure and store all the purchase information

Also copy the contents of purchase to the users individual file.

7. Take input of customer location [we can restrict it to certain places] and use shortest Path algorithm to find the shortest path from seller location to customer location

Then, use some logic to estimate delivery time and display the same plus copy it to the purchase history file of the user

8. Customer has to Select the delivery speed

a. **Normal**

b. **Express** (Extra charges will be levied for this)

c. **One Day Delivery** (Extra charges will be levied for this)

Add the contents of the cart, add taxes as certain predefined percentage of selling price.

DISPLAY THE GRAND TOTAL and display the statement that the customer is obliged to pay it and no exceptions can be made

***Note : Our E Commerce System has pay on delivery option only.***

9. After this display **THANK YOU FOR SHOPPING**

10. Once again, if the customer logs in, their can see the status of the package and track it

12. The order will be pushed into priority queue and execution of deliveries will take place according to distance between seller and buyer and speed of delivery chosen

13. To execute deliveries the seller has to dequeue his sales queue

14. If customer wants to cancel his order, he can do so, and that particular element will be popped out and customer purchase history file gets updated

and also the hash table gets updated