Hard Problem Project Implementation

I implemented the solution in Python program language. To store all the details I have used the sqllite3 database. This application will work after the restart as well.

Vendor Mode:

1. Adding Shopping Category:

```
> python3 app.py
Enter the Category to use to Application
 1. Vendor Mode
 2. Customer Mode
1
############################ WELCOME TO VENDOR MODE ############################

        Enter the Task Number to perform the following task

        1. Adding Shopping Catageory
        2. Adding shopping item
        3. View Customer Orders
        4. View Shopping Categories
        5. View Shopping Items
        6. Change Order Status


Enter the task Code within range [1-6]: 1
Enter your Shopping Item Catageory: Movies
Succesfully Added the Item Categeory.
```

2. Adding Shopping Item:

```
> python3 app.py
Enter the Category to use to Application
 1. Vendor Mode
 2. Customer Mode
1
############################# WELCOME TO VENDOR MODE #############################

        Enter the Task Number to perform the following task

        1. Adding Shopping Catageory
        2. Adding shopping item
        3. View Customer Orders
        4. View Shopping Categories
        5. View Shopping Items
        6. Change Order Status


Enter the task Code within range [1-6]: 2
Are you willing to add Item to the Store[y/n]: y
Enter your Item name: Oppo A31
Enter Original Price of the product: 39433
Enter the discount price for the product if not available Enter Rs.0: 35000
Enter the weight of the product: 215g
Enter the Appropriate Category Id based on the product Catageory: ELECT4072510
Item Added Succesfully into the Store.
Are you willing to add Item to the Store[y/n]: n
```

3. View Customer Order:

```
> python3 app.py
Enter the Category to use to Application
 1. Vendor Mode
 2. Customer Mode
1
############################## WELCOME TO VENDOR MODE ##############################

        Enter the Task Number to perform the following task

        1. Adding Shopping Catageory
        2. Adding shopping item
        3. View Customer Orders
        4. View Shopping Categories
        5. View Shopping Items
        6. Change Order Status


Enter the task Code within range [1-6]: 3
Do you want to Sort the Customer Orders? [y/n]: y
Available Sorts and Filters are:
                                1. Sort and Filetr by Order Id
                                2. Sort and Filetr by Order Status
                                3. Sort and Filetr by Billing Date
                                4. Sort and Filetr by Total Amount
                                5. Sort and Filetr by Delivery Option
                                Enter your Filter by Id within [1-5]: 1
Order Id        Order Status    Billing Date and Time    Total Amount    Delivery Option         Payment Methos
ORD9875564 : completed : 25/07/2020 19:03:56 : 728162.88 : home : online
ORD9884545 : inProgress : 25/07/2020 18:37:07 : 791087.64 : home : card
ORD9888109 : inProgress : 25/07/2020 18:21:18 : 2157395.0 : home : online
```

4. View Shopping categories:

```
> python3 app.py
Enter the Category to use to Application
 1. Vendor Mode
 2. Customer Mode
1
############################## WELCOME TO VENDOR MODE ##############################

        Enter the Task Number to perform the following task

        1. Adding Shopping Catageory
        2. Adding shopping item
        3. View Customer Orders
        4. View Shopping Categories
        5. View Shopping Items
        6. Change Order Status


Enter the task Code within range [1-6]: 4
                Category Id             Shopping Category
                ELECT4072510            Electronics
                FASHI4287660            Fashion
                MEDIC4234405            Medicines
                MOVIE4227288            Movies
                STATI4086172            Stationary
```

5. View Shopping Items:

```
Enter the task Code within range [1-6]: 5
Do you want to Sort the Products? [y/n]: y
Available Sorts and Filters are:
                                    1. Sort and Filetr by Item Name
                                    2. Sort and Filetr by Item Price
                                    3. Sort and Filetr by Item Discount Price
                                    4. Sort and Filetr by Item Weight
                                    5. Sort and Filetr by Item Category Id
                                    Enter your Filter by Id within [1-5]: 1
Item Name                       Item Price      Docount Price   Item Weight     Item Catageory_ID
Apple Macbook Air-13 : Rs.74999.0 : Rs.71999.0 : Weight:2.1KG : Id: ELECT4072510
Apple Macbook Pro-13 : Rs.214999.0 : Rs.209450.0 : Weight:1.9KG : Id: ELECT4072510
Mi Notebook 14 : Rs.59999.0 : Rs.57999.0 : Weight:2.3KG : Id: ELECT4072510
One Plus 8 : Rs.49999.0 : Rs.47999.0 : Weight:191g : Id: ELECT4072510
One Plus Nord : Rs.29999.0 : Rs.28999.0 : Weight:199G : Id: ELECT4072510
Oppo A31 : Rs.39433.0 : Rs.35000.0 : Weight:215g : Id: ELECT4072510
```

6. Change Order Status:

```
Enter the task Code within range [1-6]: 6
Enter your Order Id: ORD9875564
Available Status for the Order
 1. In Progress
 2. completed
 3. Canceled
 Enter your status:3
Order Id: ORD9875564
Order Staus: canceled
Billing Time: 25/07/2020 19:03:56
Total Amount: 728162.88
Mode of Delivery: Home
Payment Method: Online
```

Customer Mode:

7. Order Creation:

```
Enter Mobile number: 9234432532
Enter Customer payment Method
 1.Cash
 2.Card
 3.Online
 Enter your choice between [1-3]: 2
Enter your delivery Options
 1. Home
 2. Take Away
 Enter your Options between [1-2]: 1
Enter your home distance in kilometers from the Store: 27
Enter your Shipping Address: Hyderabad
PRD198089 One Plus 8 : Rs.49999.0 : Rs.47999.0 : Weight:191g : Id: ELECT4072510
PRD197257 Apple Macbook Air-13 : Rs.74999.0 : Rs.71999.0 : Weight:2.1KG : Id: ELECT4072510
PRD199115 Apple Macbook Pro-13 : Rs.214999.0 : Rs.209450.0 : Weight:1.9KG : Id: ELECT4072510
PRD197986 One Plus Nord : Rs.29999.0 : Rs.28999.0 : Weight:199G : Id: ELECT4072510
PRD195732 Mi Notebook 14 : Rs.59999.0 : Rs.57999.0 : Weight:2.3KG : Id: ELECT4072510
PRD196404 Oppo A31 : Rs.39433.0 : Rs.35000.0 : Weight:215g : Id: ELECT4072510
Enter the product id which you want to buy: PRD195732
Enter the number of products/items you want to order: 2
Do you want to order another product [y/n]: y
Enter the product id which you want to buy: PRD197986
Enter the number of products/items you want to order: 1
Do you want to order another product [y/n]: n
[('ORD9863187', 'Mi Notebook 14', 2, 'RECP77343850'), ('ORD9863187', 'One Plus Nord', 1, 'RECP77343850')]
Sucess.!
Success.!
[(59999.0, 57999.0)]
[(29999.0, 28999.0)]
################## ORDER BILLING #######################
Shop Name: GadgetifyWithGSBlr
Shop Address: 311/5 Akshay nagar, Bangalore, Karnataka, India
Shop Contack number: +91 9988776655
Order Id: ORD9863187
Customer Name: Caleb
Customer Phone Number: 9234432532
Item Name : Mi Notebook 14 Item Quantity: 2 Item Price : 59999.0 Discount Price: 57999.0
Item Name : One Plus Nord Item Quantity: 1 Item Price : 29999.0 Discount Price: 28999.0
Total Amount to be paid: 298753.82
Total tax Amount: 8699.82
Your Savings: 5000.0
Total Shipping Charges: 60
Shipping Address: Hyderabad
Distance: 27
Payment Method Used: card
Your Billing Time: 25/07/2020 19:23:10
Order Status: inProgress
```

8. Order Status:

```
          Enter the Task Number to perform the following task

     1. Order a Product
     2. Order Status

Enter the task code within range [1-2]:2
Enter your Order Id: ORD9863187
#################### ORDER BILLING ######################
Shop Name: GadgetifyWithGSBlr
Shop Address: 311/5 Akshay nagar, Bangalore, Karnataka, India
Shop Contack number: +91 9988776655
Order Id: ORD9863187
Customer Name: Caleb
Customer Phone Number: 9234432532
Item Name : Mi Notebook 14 Item Quantity: 2 Item Price : 59999.0 Discount Price: 57999.0
Item Name : One Plus Nord Item Quantity: 1 Item Price : 29999.0 Discount Price: 28999.0
Total Amount to be paid: 298753.82
Total tax Amount: 8699.82
Your Savings: 5000.0
Total Shipping Charges: 60
Shipping Address: Hyderabad
Distance: 27
Payment Method Used: home
Your Billing Time: 25/07/2020 19:23:10
Order Status: inProgress
```