Test Code Run1

```
File Edit Shell Debug Options Window Help
 Do you want to go in main menu again? press y or Y, if you dont want to go in main menu and want to logout,
Press any key...
y
Choose what you want:)!
*************
Select the option you want
a. View list for products
b.Add product to your shopping cart
c.Remove product from your cart
d.View your cart
f.View shopping history
g.Logout
Enter your choice:d
 ***Your Cart***
S.no Products Stock Price_per_item Barcode
         CadburryCrunch
                                               120
70
540
         Hob Nob
         Cream Wheat
         Malt-O-Meal
Scotts Porage
Dunkin Donuts
                                               450
230
345
                                                                   223
224
                                                                   333
         Betty Crocker
Mars Mufin
                                                                   334
335
         AngelDelight
                                                                   444
         Magnolia
Selecta
```

```
🌛 Python 3.7.7 Shell
File Edit Shell Debug Options Window Help
S.no Products Stock Price_per_item Barcode
                           7 70
6 540
5 450
6 230
0 345
7 780
6 235
5 245
6 170
         Triscuit
Cream Wheat
         Malt-O-Meal
Scotts Porage
Dunkin Donuts
                                                                      223
                                                                      224
333
334
335
444
         Betty Crocker
Mars Mufin
AngelDelight
9 Magnolia 6 170 445
Do you want to go in main menu again? press y or Y, if you dont want to go in main menu and want to logout,
Press any key...
Select the option you want
a.View list for products
b.Add product to your shopping cart
c.Remove product from your cart
d.View your cart
e.Checkout
f.View shopping history
g.Logout
 Enter your choice:f
```

```
Do you want to go in main menu again? press y or Y, if you dont want to go in main menu and want to logout,
Press any key...

Y

Choose what you want:)!
************************

Select the option you want
******************************

a.View list for products
b.Add product to your shopping cart
c.Remove product from your cart
d.View your cart
e.Checkout
f.View shopping history
g.Logout
Enter your choice:g

Activate \
You are now logout!

So to Setting
```

Test Code Run2

Test Code Run3

```
Python 3.7.7 hell
File Edit Shell Debug Options Window Help
Python 3.7.7 (tags/v3.7.7:d7c567b08f, Mar 10 2020, 10:41:24) [MSC v.1900 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\FAST COMPUTER SERVIC\Documents\Api2\OOP project\A1_CS_19075_1.py
First you have to make an account
Kindly share some your basic informations!
Enter your First name: Zuhaira
Enter your Last name: AbdullahSiddiqui
Enter your address: StreetXXXHouseXXX, Karachi
Enter your plone number: 92000000

your account has been made successfully
One of the company of the compan
```

```
File Edit Shell Debug Options Window Help
 You didn't buy any thing from this shop...
Do you want to purchase some thing from this shop?[Y/N]
y
***Your Cart***
S.no Products Stock Price_per_item Barcode
             Hob Nob
                                                                        120
                                                                                                     112
                                                                                                     113
222
223
                                                                        70
                                                                        450
                                                                                                     224
333
                                                                        230
                                                                                                     334
                                                                        780
                                                                        235
  11
                                                                        170
11 Magnolla 3 170
12 Selecta 0 115
How many products you want to buy:3
Enter the BarCode of Product: 1
Enter the BarCode of the product you want to buy:333
Enter the quantity you want to purchase
The quantity of Dunkin Donuts is less than that you add in your cart Enter the BarCode of Product: 2
Enter the BarCode of the product you want to buy:445
Enter the quantity you want to purchase
Enter the BarCode of Product: 3
Enter the BarCode of the product you want to buy:223
Enter the quantity you want to purchase
60
 Thank You For Shoping
```

```
Python 3.7.7 Shell
File Edit Shell Debug Options Window Help
Choose what you want:)!
Select the option you want
a.View list for products
b.Add product to your shopping cart
c.Remove product from your cart
d.View your cart
e.Checkout
f.View shopping history
g.Logout
Enter your choice:f
***Your Cart***

        CadburryCrunch
        45

        Hob Nob
        4

        Triscuit
        5

        Cream Wheat
        65

                                                                                                                         113
                 Cream Wheat
Malt-O-Meal
Scotts Porage
                                                                                                                         222
223
224
                                                                                      540
                                                                     6
55
                 Dunkin Donuts
Betty Crocker
Mars Mufin
                                                                                      345
                                                                                                                          333
                                                                                      780
235
                                                                                                                          334
335
                 AngelDelight
Magnolia
                                                                                                                          444
445
```

Question1:

Problem Description

The problem arises while I was working in this project is that I was unable to associate classes by aggregation or composition, I was trying to use abstract class but the code messed up and I was unable to solve this. I tried to relate checkout class and shopping class with association, but my customer class raised error and did not recognizing the instance variable, I tried to solve this issue and associate shopping class and Checkout class, but I failed... so I chose the simplest way... The second problem I was facing, add and remove the product. I was unable to take the simple route of add and remove of the product, the other problem which I faced to store removal product in another function, I tried many times and apply different adeptness to solve this problem but it did not sot out so I make its list in the same function and print it...

Question 2

Distinguish feature

Distinguish feature of my project is I thought implementation of class Shopping Cart... because I am asking the user each product quantity, one's want to add... And in the add Product function I use long method...

Question 3

Flow of the Project

The code executes from class customer takes input customer's information and save the information then allow the customer to login in menu, then menu showed to the user and then allow customer to choose the choices, when customer choose any choice the respective function was called which are defined with if and elif, and then works on respective choices and after the execution of the respective function ask the customer want to go in main menu or not. If customer wants, goes to the main menu by using 'y' or 'Y' and similarly choose another choice and go to the respective function, the different functions are defined in different classes which are interlinked to each other... if one's not want to go in main menu press any key and logout....

Question 4

Most Challenging Part

The most challenging part of my project which I was facing is to add and remove products from the cart and you will see I follow a very long route of coding.

Question 5

New thing learnt in python

The thing I say that I learnt new in is not especial because I follow the techniques which I learnt in the class like inheritance and exceptions overriding...

Question 6

Future Expansion

I want to expand my code with the most interesting application "GUI", and using the associations in which I will have to get strong command...