

Shopping Cart Problem – Medium (Intermediate)

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Approach to the solution:

The approach to shopping cart problem – medium is done using python, basically creating single dictionary for the retrieval of price, discount price . In my solution there is only one dictionary where each key is item number which is associated with list of items which include price, discount price, weights(in grams). Check for valid Customer name, phone number and also payment method is added to ensure proper input is given by user. Based upon the delivery distance, shipping charge is calculated and displayed .At last bill is generated based on the selected products by customer (multiple items can to be chosen along with it's quantity). Net tax on actual price, net tax on discount price is also calculated and displayed , payment method along with total sum to be paid is displayed in the bill. Shipping address if chosen home delivery is also displayed along with shipping distance and shipping charge.

Scenario 1: If home delivery is chosen

Screenshot 1:

```
***** Welcome to GadgetifywithBlr *****
Here is the list of items

+-----+-----+-----+-----+-----+
| Item_no. | Item_Name | Price | Discount_price | Weight |
+-----+-----+-----+-----+-----+
| 1 | Wireless Keyboard - HP multimedia | 1350 | 1000 | 500 |
| 2 | Wireless Optical mouse - Lenova Yoga | 5900 | 4000 | 100 |
| 3 | boAt Bassheads 242 Wired Headset | 500 | 450 | 200 |
| 4 | boAt Earpods 201 earbuds | 2000 | 1500 | 100 |
| 5 | Mi 20000 mAh Powe Bank | 1600 | 1200 | 400 |
| 6 | boAt bluetooth soundbar | 8000 | 7000 | 700 |
| 7 | M3 Bluetooth 4.2 Fitband | 350 | 300 | 300 |
| 8 | Sandisk 64 GB pendrive | 2500 | 2000 | 200 |
+-----+-----+-----+-----+-----+

Please Provide the following details :
Enter your name :Bharath C S
Enter your PhoneNumber :919945223344
Enter the payment method(cash/card/online) :card
Please select the items to be purchased from above list :
Enter the item number :3
Enter it's quantity :2
Want to purchase another item : (press y to continue / n to quit) y
Please select the items to be purchased from above list :
Enter the item number :2
Enter it's quantity :2
Want to purchase another item : (press y to continue / n to quit) n
Choose t for Takeaway/ h for Home Delivery : h
Enter the distance from shop to the delivery address(in km) : 20
Enter shipping address : Samrudhi Nilaya,Scout camp road, Bangalore
```

Screenshot 2:

```
***** Bill Details *****
Shop Name: GadgetifyWithBlr
Shop Address: 311/5 Akash Nagar , Bangalore,Karnataka,India
Shop Phone.No : +91 9988776655

Date and Time of Purchase : 11/07/2020 09:39:39

Customer Name : Bharath C S
Customer Phone.No: 919945223344

-----+-----+-----+-----+
| Item_name | Quantity | Price | Discount_Price |
-----+-----+-----+-----+
| boAt Bassheads 242 Wired Headset | 2 | 1000 | 900 |
| Wireless Optical mouse - Lenova Yoga | 2 | 11800 | 8000 |
-----+-----+-----+-----+

Total Tax on actual price of items : 768.00
Total Tax on discount price of items : 534.00
Total amount saved: 3900
Shipping address: Samrudhi Nilaya,Scout camp road, Bangalore
Shipping distance(in Km): 20.0
Shipping charges : 30
Amount to be paid: 9464.00
Payment method used: card

***** Visit Again, Happy shopping *****
```

Scenario 2: If take away is chosen

Screenshot 3:

```
***** Welcome to GadgetifyWithBlr *****
Here is the list of items

-----+-----+-----+-----+-----+
| Item_no. | Item_Name | Price | Discount_price | Weight |
-----+-----+-----+-----+-----+
| 1 | Wireless Keyboard - HP multimedia | 1350 | 1000 | 500 |
| 2 | Wireless Optical mouse - Lenova Yoga | 5900 | 4000 | 100 |
| 3 | boAt Bassheads 242 Wired Headset | 500 | 450 | 200 |
| 4 | boAt Earpods 201 earbuds | 2000 | 1500 | 100 |
| 5 | M1 20000 mAh Powe Bank | 1600 | 1200 | 400 |
| 6 | boAt bluetooth soundbar | 8000 | 7000 | 700 |
| 7 | M3 Bluetooth 4.2 Fitband | 350 | 300 | 300 |
| 8 | Sandisk 64 GB pendrive | 2500 | 2000 | 200 |
-----+-----+-----+-----+-----+

Please Provide the following details :
Enter your name :Bharath C S
Enter your PhoneNumber :919945223344
Enter the payment method(cash/card/online) :card
Please select the items to be purchased from above list :
Enter the item number :3
Enter it's quantity :2
Want to purchase another item : (press y to continue / n to quit) y
Please select the items to be purchased from above list :
Enter the item number :2
Enter it's quantity :2
Want to purchase another item : (press y to continue / n to quit) n
Choose t for Takeaway/ h for Home Delivery : t
```

Screenshot 4:

```
***** Bill Details *****
Shop Name: GadgetifyWithBlr
Shop Address: 311/5 Akash Nagar , Bangalore,Karnataka,India
Shop Phone.No : +91 9988776655

Date and Time of Purchase : 11/07/2020 09:48:33

Customer Name : Bharath C S
Customer Phone.No: 919945223344

-----+-----+-----+-----+
| Item_name | Quantity | Price | Discount_Price |
-----+-----+-----+-----+
| boAt Bassheads 242 Wired Headset | 2 | 1000 | 900 |
| Wireless Optical mouse - Lenova Yoga | 2 | 11800 | 8000 |
-----+-----+-----+-----+

Total Tax on actual price of items : 768.00
Total Tax on discount price of items : 534.00
Total amount saved: 3900
Shipping charges : 0
Amount to be paid: 9434.00
Payment method used: card

***** Visit Again, Happy shopping *****
```

Scenario 3: When home delivery is chosen for more than 50km , say 60km

Screenshot 5:

```
***** Welcome to GadgetifyWithBlr *****
Here is the list of items

Item_no.  Item_Name  Price  Discount_price  Weight
-----
1  Wireless Keyboard - HP multimedia  1350  1000  500
2  Wireless Optical mouse - Lenova Yoga  5900  4000  100
3  boAt Bassheads 242 Wired Headset  500  450  200
4  boAt Earpods 201 earbuds  2000  1500  100
5  Mi 20000 mAh Powe Bank  1600  1200  400
6  boAt bluetooth soundbar  8000  7000  700
7  M3 Bluetooth 4.2 Fitband  350  300  300
8  Sandisk 64 GB pendrive  2500  2000  200

Please Provide the following details :
Enter your name :Bharath C S
Enter your PhoneNumber :919945223344
Enter the payment method(cash/card/online) :card
Please select the items to be purchased from above list :
Enter the item number :3
Enter it's quantity :2
Want to purchase another item : (press y to continue / n to quit) y
Please select the items to be purchased from above list :
Enter the item number :2
Enter it's quantity :2
Want to purchase another item : (press y to continue / n to quit) n
Choose t for Takeaway/ h for Home Delivery : h
Enter the distance from shop to the delivery address(in km) : 60
Shipping is not available
so shipping charge is made zero!
```

Screenshot 6:

```
***** Bill Details *****
Shop Name: GadgetifyWithBlr
Shop Address: 311/5 Akash Nagar , Bangalore,Karnataka,India
Shop Phone.No : +91 9988776655

Date and Time of Purchase : 11/07/2020 11:14:13

Customer Name : Bharath C S
Customer Phone.No: 919945223344

Item_name  Quantity  Price  Discount_Price
-----
boAt Bassheads 242 Wired Headset  2  1000  900
Wireless Optical mouse - Lenova Yoga  2  11800  8000

Total Tax on actual price of items : 768.00
Total Tax on discount price of items : 534.00
Total amount saved: 3900
Shipping is not available, shipping charge : 0
Amount to be paid: 9434.00
Payment method used: card

***** Visit Again, Happy shopping *****
```