

## Shopping cart Problem (Medium)

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**Language:** PYTHON

**Approach:** A python dictionary is used to store the list of shopping items which has a number as key and value is a list which comprises of item name, price, discounted price, weight. Also all the input variables are taken and all the shopped items are stored in other dictionary. For the shipping cost an if condition is used to calculate the price. After all this a bill is generated which consists of static data and the shopped items are printed using prettyTable library and other required fields are shown in bill.

**Code:**

```
from prettytable import PrettyTable
#shopping items
shoppingItems = {
    #no: [ name ,price, discounted_price, weight ]
    1 : ['Basshead Earphones' ,1200 , 899 , 150] ,
    2 : ['Bluetooth Mouse' ,600 , 600 , 120] ,
    3 : ['32-GB Pen drive' ,499 , 399 , 30] ,
    4 : ['29-Inch LED monitor' ,33499, 29999 , 4000] ,
    5 : ['i7-processor' ,18999, 18999 , 15] ,
    6 : ['1-TB Hard Drive' ,3999 , 3999 , 175] ,
    7 : ['16-GB DDR4 RAM' ,10999, 9999 , 35]
}
y=PrettyTable()
y.field_names = ["Item No.", "Item Name", "Price","Discount price","Weight"]
for i in shoppingItems:
    y.add_row([i , shoppingItems[i][0], shoppingItems[i][1], shoppingItems[i][2], shoppingItems[i][3] ])

global total_bill
total_bill=0
discounted_bill=0

#customer data input
Name = input('\nEnter your Name: ')
phone = input('Enter Contact No.: ')
payMethod = input('Enter payment method(cash/card/online): ')

bill = { } #storing purchased items

#shopping list input starts from here
```

```

while(True):
    print("\nShopping list::\n")
    print(y)

    choice=int(input('Enter your choice:'))
    quantity=int(input('Enter quantity:'))
    bill[choice]=quantity
    total_bill += shoppingItems[choice][1]*quantity
    discounted_bill+=shoppingItems[choice][2]*quantity
    opt=input('\nDo you want to continue:(Y-Yes/N-No):')
    if opt=='n':
        break
#shopping list input ends here
dist=0
address=""

thd=input('Select T-Takeaway/H-Home Delivery: ')
if thd=='h' :
    dist=int(input('Distance from shop to the delivery address(in km): '))
    address=input('Shipping Address: ')

ship_charge=0
if dist<=5:
    ship_charge=0
elif dist<=20:
    ship_charge=30
elif dist<=50:
    ship_charge=60
else:
    ship_charge=-1

#BILL GENERATION
print('-----')
print('                Your bill:                \n')
#printing static data
print(
    '                Shop name: GadgetifyWithGSBlr\n',
    '                Shop address: 311/5 Akshay nagar,\n',
    '                Bangalore, Karnataka, India\n',
    '                Shop contact no: +91 9988776655\n'
)

```

```

#end of printing static data
#printing variable data
print('\nCustomer name: '+ Name)
print('Contact No.: '+ phone)
print('\nItems bought:')

x = PrettyTable()
x.field_names = ["Item Name", "Quantity", "Price", "Discount price"]

for i in bill:
    x.add_row([shoppingItems[i][0],bill[i] , shoppingItems[i][1]*bill[i], shoppingItems[i][2]*bill[i] ])
print(x)

print('\nTotal tax on original price: %.2f' %(total_bill*0.06))
print('\nTotal tax on discount price: %.2f' %(discounted_bill*0.06))

if ship_charge== -1:
    print('Shipping not possible')
    ship_charge=0
else:
    print('Total Shipping charges: ',ship_charge)

print('Total Amount saved: ', total_bill-discounted_bill)

print('Amount to be paid: %.2f' %(discounted_bill*1.06 + ship_charge))
print('\nPayment method used:'+ payMethod)

import datetime
now = datetime.datetime.now()
print ('Date and time:',now.strftime("%d-%m-%Y %H:%M:%S"))

if thd=='h':
    print('Shipping Address:', address)

print('-----')

```

Output:

Enter your Name: AKSHIT989  
Enter Contact No.: 9876543210  
Enter payment method(cash/card/online): card

Shopping list::

Item No.	Item Name	Price	Discount price	Weight
1	Basshead Earphones	1200	899	150
2	Bluetooth Mouse	600	600	120
3	32-GB Pen drive	499	399	30
4	29-Inch LED monitor	33499	29999	4000
5	i7-processor	18999	18999	15
6	1-TB Hard Drive	3999	3999	175
7	16-GB DDR4 RAM	10999	9999	35

Enter your choice:1

Enter quantity:1

Do you want to continue:(Y-Yes/N-No):Y

Shopping list::

Item No.	Item Name	Price	Discount price	Weight
1	Basshead Earphones	1200	899	150
2	Bluetooth Mouse	600	600	120
3	32-GB Pen drive	499	399	30
4	29-Inch LED monitor	33499	29999	4000
5	i7-processor	18999	18999	15
6	1-TB Hard Drive	3999	3999	175
7	16-GB DDR4 RAM	10999	9999	35

Enter your choice:4

Enter quantity:2

Do you want to continue:(Y-Yes/N-No):n

Select T-Takeaway/H-Home Delivery: h

Distance from shop to the delivery address(in km): 23

Shipping Address: Golden Park, Bangalore

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Your bill:

Shop name: GadgetifyWithGSBlr  
Shop address: 311/5 Akshay nagar,  
Bangalore, Karnataka, India  
Shop contact no: +91 9988776655

Customer name: AKSHIT989  
Contact No.: 9876543210

Items bought:

Item Name	Quantity	Price	Discount price
Basshead Earphones	1	1200	899
29-Inch LED monitor	2	66998	59998

Total tax on original price: 4091.88

Total tax on discount price: 3653.82

Total Shipping charges: 60

Total Amount saved: 7301

Amount to be paid: 64610.82

Payment method used:card

Date and time: 06-07-2020 15:09:27

Shipping Address: Golden Park, Bangalore  
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