

Shopping Cart

This assignment is to build a Shopping Cart class analogous to your online shopping.

The **item** class

Each item will have the information like product name, quantity and unit price.

The **ShoppingCart** class

User should be able to do the following operations on the cart:

addToCatalog(Item item)

Add the item to the catalog.

addToCart(Item item):

Add the item to the cart.

removeFromCart(Item item):

Remove the item from the cart.

showCart():

Display all the items in the cart with item name and quantity.

showCatalog():

Display all the items in the catalog with item name, quantity and price.

getTotalAmount():

Calculate the total amount for the items in the cart.

getPayableAmount():

Gets the payable amount, by deducting discount (if any) and add tax(15%) to the total amount of items in cart.

Following are the discount percentages which need to be deducted from the total amount:

Valid Coupons:

IND10-10% Discount

IND20-20% Discount

IND30-30% Discount

IND50-50% Discount

applyCoupon():

Apply a coupon code.

printInvoice():

Display all the items with the quantity, unit price, total amount and payable amount.

* apply coupon if valid

Instructions:

First line contains number of lines.

Following are the different options:

Item:- Add the item to the catalog(Hint: Catalog array)

catalog:Display all the items in the catalog.

Add: add the item to the cart.(Hint : cart array)

Show: Display all the items in the cart.

totalAmount: Display the total amount.

payableAmount:Display the payable amount.

Remove:remove the item from the cart.

Coupon:apply coupon code

Print: print the invoice in the following format.

ItemName Itemquantity Itemprice

Xyz 1 100

totalAmount:100

Disc:0.0(applied,if coupon is valid)

Tax:15

Payable amount:115

Sample Input:

18

Item greentea,128,120

Item Eggs,65,5

Item rice5kg,109,300

Item curd,22,30

Item cofee,81,300

catalog

add curd,19

add cofee,16

show

totalAmount

remove curd,5

show

totalAmount

remove cofee,1

show

totalAmount

payableAmount

print

Sample Output:

greentea 128 120.0

Eggs 65 5.0

rice5kg 109 300.0

curd 22 30.0

cofee 81 300.0

curd 19

cofee 16

totalAmount: 5370.0

curd 14

cofee 16

totalAmount: 5220.0

curd 14

cofee 15

totalAmount: 4920.0

Payable amount: 5658.0

Name quantity Price

curd 14 30.0

cofee 15 300.0

totalAmount: 4920.0

Disc%:0.0

Tax:738.0

Payable amount: 5658.0