**Experiment: 1**

**SHOPPING CART**

**Algorithm:-**

Step 1: Start

Step 2: Declare and define functions “additem”, “deleteitem”, “updatebill” ` and “displaycart”

Step 3: Declare structure cart\_items with variables “code”, “quantity” and ` ` “cost”

Step 4: Declare variables stock[i][j], choice, item\_number, total.

Step 5: Print the stock items.

Step 6: Read choice from the user.  
 Case ‘1’ – call “additem” function which adds item in your cart.

Case ‘2’ – call “deleteitem” function which deletes items in your ` ` cart

Case ‘3’ – call “displaycart” function which displays your carts

Case ‘default’ – goto 8

Step 7: Call “updatebill” function to display items in your cart and the total ` ` bill.

Step 8: Stop

**Code:-**

#include<stdio.h>

#include<stdlib.h>

void additem();

void deleteitem();

void updatebill();

void displaycart();

int stock[5][3]={{0,0,0},{1,12,100},{2,15,200},{3,17,150},{4,25,250}};

typedef struct{

int code;

int quantity;

float cost;

}cartitems;

cartitems c[10]; //array of structure

int inum=0;

float total=0;

int main()

{

int i,j,n,choice;

do{

printf("\n\nItem code\tQuantity\tPrice\n");

for(i=1;i<5;i++)

{

for(j=0;j<3;j++)

printf("%d\t\t",stock[i][j]);

printf("\n");

}

printf("\nPlease enter your choice: ");

printf("\n\n1:Add item to cart\n2:Delete item from cart\n3:Display\n4:exit:");

scanf("%d",&choice);

switch(choice)

{

case 1:additem();

break;

case 2:deleteitem();

break;

case 3:displaycart();

break;

default: exit(0);

};

}while(1);

return 0;

}

void additem()

{

printf("\nYou have called additem\n");

printf("\nEnter the code and quantity of the item to be added to your cart:");

scanf("%d %d",&c[inum].code,&c[inum].quantity);

c[inum].cost=c[inum].quantity\*stock[c[inum].code][2];

printf("\nThe item with code%d is added to the cast\n", c[inum].code);

printf("\nYour cart contains....\n");

printf("\nItem code\t quantity\tcost\n");

printf("%d\t\t%d\t\t%0.2f",c[inum].code,c[inum].quantity,c[inum].cost);

stock[c[inum].code][1]=stock[c[inum].code][1]-c[inum].quantity;

inum++;

updatebill();

return;

}

void deleteitem()

{

printf("\nYour have called deleteitem()\n");

printf("\nLast item from your cart deleted\n");

inum--;

stock[c[inum].code][1]=stock[c[inum].code][1]+c[inum].quantity;

updatebill();

return;

}

void updatebill()

{

int i;

total=0;

printf("\nYou have called updatebill\n");

printf("\nThere are %d items in your cart...\n\n",inum);

for(i=0;i<inum;i++)

total=total+c[i].cost;

return;

}

void displaycart()

{

int i;

printf("\nYou have called displaycart()\n");

printf("\nThere are %d items in your cart...\n\n",inum);

printf("\nItemcode\tquantity\tamount\n");

for(i=0;i<inum;i++)

printf("\n%d\t\t%d\t\t%5.2f",c[i].code,c[i].quantity,c[i].cost);

printf("\n\n\n\t\t\tGrand total is:%5.2f\n",total);

return;

}

OUTPUT:-







