

INPUT:-

```
import java.text.DecimalFormat;
```

```
import java.util.ArrayList;
```

```
import java.util.List;
```

```
interface PaymentStrategy {
```

```
    public void pay(int amount);
```

```
}
```

```
class ShoppingCart {
```

```
    //List of items
```

```
    List<Item> items;
```

```
    public ShoppingCart(){
```

```
        this.items=new ArrayList<Item>();
```

```
    }
```

```
    public void addItem(Item item){
```

```
        this.items.add(item);
```

```
    }
```

```
    public void removeItem(Item item){
```

```
        this.items.remove(item);
```

```
    }
```

```
public int calculateTotal(){  
    int sum = 0;  
    for(Item item : items){  
        sum += item.getPrice();  
    }  
    return sum;  
}  
  
public void pay(PaymentStrategy paymentMethod){  
    int amount = calculateTotal();  
    paymentMethod.pay(amount);  
}  
}
```

```
class Item {  
    private String upcCode;  
    private int price;  
    public Item(String upc, int cost){  
        this.upcCode=upc;  
        this.price=cost;  
    }  
  
    public String getUpcCode() {  
        return upcCode;  
    }  
}
```

```

        public int getPrice() {

            return price;

        }

    }

class PaypalStrategy implements PaymentStrategy {

    private String emailId;

    private String password;

    public PaypalStrategy(String email, String pwd){

        this.emailId=email;

        this.password=pwd;

    }

    @Override

    public void pay(int amount) {

        System.out.println(amount + " paid using Paypal.");

    }

}

class CreditCardStrategy implements PaymentStrategy {

    private String name;

    private String cardNumber;

    private String cvv;

    private String dateOfExpiry;

```

```

public CreditCardStrategy(String nm, String ccNum, String cvv, String expiryDate){

    this.name=nm;

    this.cardNumber=ccNum;

    this.cvv=cvv;

    this.dateOfExpiry=expiryDate;

}

@Override

public void pay(int amount) {

    System.out.println(amount + " paid with credit/debit card");

}

}

public class ShoppingCartTest {

    public static void main(String[] args) {

        ShoppingCart cart = new ShoppingCart();

        Item item1 = new Item("1234",60);

        Item item2 = new Item("5678",40);

        cart.addItem(item1);

        cart.addItem(item2);

        //pay by paypal
    }
}

```

```
cart.pay(new PaypalStrategy("myemail@example.com", "pwd"));
```

```
//pay by credit card
```

```
cart.pay(new CreditCardStrategy("Aparna Bindage", "1234567890123456",  
"786", "12/15"));
```

```
}
```

```
}
```

```
/*
```

OUTPUT:

100 paid using Paypal.

100 paid with credit/debit card

```
*/
```