/*Develop a Java program to create a class Bank that maintains two kinds of account for its customers, one called savings account and the other current account. The savings account provides compound interest and withdrawal facilities but no cheque book facility. The current account provides cheque book facility but no interest. Current account holders should also maintain a minimum balance and if the balance falls below this level, a service charge is imposed.Create a class Account that stores customer name, account number and type of account. From this derive the classes Cur-acct and Sav-acct to make them more specific to their requirements. Include the necessary methods in order to achieve the following tasks:

a) Accept deposit from customer and update the balance.

b) Display the balance.

c) Compute and deposit interest

d) Permit withdrawal and update the balance

Check for the minimum balance, impose penalty if necessary and update the balance.*/

```
import java.util.Scanner;
class Bank
{
   float balance;
}

class Account extends Bank
{
   String cus_name,acc_type;int acc_no;
   Account(String name,int acc_no,String acc_type)
   {
      this.cus_name=name;this.acc_no=acc_no;this.acc_type=acc_type;balance=0.0f;
   }
   void setBal(float amt)
   {
      balance+=amt;
   }
   void disBal(){
   System.out.println("Balance:Rs "+this.balance);
```

```
    }
}

class Sav_acct extends Account
{
    float comp_int,withdrawal;
    Sav_acct(String name,int acc_no,String acc_type)
    {
        super(name,acc_no,acc_type);
    }
    void inter(float rate)
    {
        System.out.println("Interest:"+(balance*rate/100));
        balance+=(balance*rate/100);
    }
}

class Cur_acct extends Account
{
    float comp_int,withdrawal;
    Cur_acct(String name,int acc_no,String acc_type)
    {
        super(name,acc_no,acc_type);
            balance=0.0f;
    }
    void with(float amt){
        if(amt<balance)
        balance-=amt;
        else
        System.out.println("Amount exceeds balance!");
    if(balance<500)
```

```
      {
         System.out.println("No minimum balance maintained!Rs.500 fine levied.");
         balance-=500;
      }
   }
}

class LabQ5
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      int k=0,j=0;int ch;boolean t=true,t1=true;
      System.out.println("Enter the number of customers:");
      int n=sc.nextInt();
      Sav_acct a[]=new Sav_acct[n];Cur_acct b[]=new Cur_acct[n];

      for(int i=0;i<n;i++)
      {
         System.out.println("Enter the name, Account type and Account number of user" +(i+1)+":");
         String name=sc.next();
         String acc_type=sc.next();
         int acc_no=sc.nextInt();

         if(acc_type.equalsIgnoreCase("savings"))
         {
            a[k]=new Sav_acct(name,acc_no,acc_type);
            while(t)
            {
               System.out.println("Enter 1.Update balance.\n2.Display balance.\n3.Compute and
deposit interest.\n4.End");
```

```
            ch=sc.nextInt();
            switch(ch){
            case 1:System.out. println("Enter the deposit amount:");
            a[k].setBal(sc.nextFloat());
            break;
            case 2:
            a[k].disBal();
            break;
            case 3:System.out.println("Enter the rate of interest:");
            a[k].inter(sc.nextFloat());
            break;
            case 4:t=false;break;
            default:System.out.println("Invalid choice");
            }
          }
          k++;
        }

        if(acc_type.equalsIgnoreCase("current"))
        {
          b[j]=new Cur_acct(name,acc_no,acc_type);
          while(t1)
          {
            System.out.println("Enter 1.Update balance.\n2.Display balance.\n3.withdraw and
update balance.\n 4.End");
            ch=sc.nextInt();
            switch(ch){
            case 1:System.out. println("Enter the deposit amount:");
            b[j].setBal(sc.nextFloat());
            break;
            case 2:
```

```
                b[j].disBal();
                break;
                case 3:System.out. println("Enter the withdraw amount:");
                b[j].with(sc.nextFloat());
                break;
                case 4:t1=false;break;
                default:System.out.println("Invalid choice");
                }
            }j++;
 } } }}
```

OUTPUT:

```
Enter the number of customers:
2
Enter the name, Account type and Account number of user1:
A
Savings
1
Enter 1.Update balance.
2.Display balance.
3.Compute and deposit interest.
4.End
1
Enter the deposit amount:
1000
Enter 1.Update balance.
2.Display balance.
3.Compute and deposit interest.
4.End
2
Balance:Rs 1000.0
Enter 1.Update balance.
2.Display balance.
3.Compute and deposit interest.
4.End
3
Enter the rate of interest:
2
Interest:20.0
Enter 1.Update balance.
2.Display balance.
3.Compute and deposit interest.
4.End
2
4.End
2
Balance:Rs 1020.0
Enter 1.Update balance.
2.Display balance.
3.Compute and deposit interest.
4.End
4
Enter the name, Account type and Account number of user2:
B
Current
2
Enter 1.Update balance.
2.Display balance.
3.withdraw and update balance.
 4.End
1
Enter the deposit amount:
1500
Enter 1.Update balance.
2.Display balance.
3.withdraw and update balance.
 4.End
2
Balance:Rs 1500.0
Enter 1.Update balance.
2.Display balance.
3.withdraw and update balance.
 4.End
3
Enter the withdraw amount:
120
Enter 1.Update balance.
2.Display balance.
3.withdraw and update balance.
 4.End
2
Balance:Rs 1380.0
Enter 1.Update balance.
2.Display balance.
3.withdraw and update balance.
 4.End
4
```