JAVA LAB 06 - BANK ACCOUNT

29-10-24

LAB - 06

Develop a Java program to create a class Bank that maintains two kinds of account for its customers, one called savings and the other current account.

Create a class Account that stores customer name, account number, type of account. From this derive the classes Cur-acct and Sav-acct to make them more specific to their requirements. Include methods to:

1. accept deposit from customer & update balance
2. display the balance
3. compute and deposit interest
4. permit withdrawal and update the balance.

Check for minimum balance, impose penalty if necessary & update the balance.

```
~~class Bank~~ {
import java.util.*
class Account {
    String cust_name;
    int acc_no;
    String acc_type;
    Account(String cust_name, int acc_no, String acc_type)
    {
        this.cust_name = cust_name;
        this.acc_no = acc_no;
        this.acc_type = acc_type;
    }
}
```

```
class Cur_acct extends Account
{
    super(cust_name, acc_no, acc_type);
    void Deposit(double amount)
    {
      double balance += amount;
      System.out.println("Amount deposited");
      System.out.println("Updated balance = "+balance);
    }
    void display()
    {
      System.out.println("Balance = "+balance);
    }
    void withdrawal(double amount)
    {
      if(amount <= balance)
      {
        balance -= amount;
        System.out.println("Amount Withdrawn");
      }
      else
      {
        System.out.println("Not enough balance");
      }
    }
    void charges()
    {
      if(balance >= 500)
        System.out.println("No charges");
      else
        double charge =
        System.out.println("₹200 is the penalty");
    }
```

```
class Sav_acct extends Account
{   double balance;
    super(cust_name, acc_no, acc_type);
    void deposit(double amount)
    {
      double balance += amount;
      System.out.println("Amount deposited");
      System.out.println("Updated balance = "
                         + balance);
    }
    void display()
    {
      System.out.println("Balance = "+balance);
    }
    void withdrawal(double amount)
    {
      if(amount <= balance)
      {
        balance -= amount;
        System.out.println("Amount Withdrawn");
      }
      else
      {
        System.out.println("Not enough balance");
      }
    }
    void interest()
    {
      if(balance >= 500){
        balance += (balance * 8.5);
        System.out.println("Updated = "+balance);
      }else
        System.out.println("Not enough balance");
    }}
```

```
public class Main
{
    public static void main(String[] args)
    {
        System.out.println("1. Deposit \n 2. Check balance
                \n 3. Withdraw (from current account)
                \n 4. Interest (for savings account)");
        System.out.println("Enter choice");
        Scanner sc = new Scanner(System.in);
        int ch = sc.nextInt();

        System.print.ln("Enter name, acct no, acct type")
        String name = Sc.Next();
        int acc_no = sc.NextInt();
        String acc_type = sc.nextLine();
        if(acc_type == "Current")
        {
            Curr_acct c = new Curr_acct(name, acc_no, acc_type);
            switch(ch) {
                case 1 : System.out.println("Enter amount")
                         int amount = sc.nextInt();
                         c.deposit(amount);
                case 2 : c.display();
                case 3 : System.out.println("Enter amount")
                         int amount = sc.nextInt();
                         c.withdrawal(amount);
                default : System.out.println("Invalid");
            }
            c.charges();
        }
        else if(acc_type == "Savings")
        {
            Sav_acct s = new Sav_acct(name, accno, acc_type);
            switch(ch){
                case 1 : s.deposit(amount);
                case 2 : s.display();
                case 3 : s.withdraw(amount);
                case 4 : s.interest();
                default : System.out.println("Invalid");
            }
        }
    }
```

Output:

1. Deposit
2. Check balance
3. Withdraw
4. Interest

Enter choice

1

Enter name, acct no, acct type

Bhoomi 12345 Current

Name: Bhoomi Acc no: 12345 Acc type: Current

Enter balance = 1000

Enter amount: 300

Balance = 1300

No charges