import java.util.Scanner;

class Account

{

String customer\_name;

long acc\_no;

float bal;

Scanner s = new Scanner(System.in);

public void input()

{

System.out.println("\nEnter the Customer Name: ");

customer\_name = s.nextLine();

System.out.println("\nEnter the Account Number: ");

acc\_no = s.nextLong();

System.out.println("\nEnter the Starting Amount (Minimum Amount = 5000): ");

bal = s.nextFloat();

if(bal<5000f)

{

System.out.println("\nAccount Balance cannot be less than 5000.0 \n");

System.exit(0);

}

}

public void display()

{

System.out.println("\nCustomer Name: "+customer\_name);

System.out.println("Account Number: "+acc\_no);

System.out.println("Amount: "+bal);

}

}

class Savings extends Account

{

Scanner s = new Scanner(System.in);

float deposit,withdraw,interest;

public void deposit()

{

System.out.println("\nEnter the amount to be deposited: ");

deposit = s.nextFloat();

bal+=deposit;

System.out.println("\nBalance: "+bal);

}

public void withdraw()

{

System.out.println("\nEnter the amount to be withdrawn: ");

withdraw = s.nextFloat();

if(bal<5000)

{

System.out.println("\nInsufficient Balance");

}

else

{

bal-=withdraw;

System.out.println("\nAmount Withdrawn: "+withdraw+"\nBalance: "+bal);

}

}

public void check\_Bal()

{

if(bal<5000)

{

System.out.println("\nInsufficient Balance!!\nBalance: "+bal);

}

else

{

System.out.println("\nBalance: "+bal);

}

}

public void interest()

{

interest=(bal\*6)/100;

bal+=interest;

System.out.println("\nInterest Credited: "+interest+"\nBalance :"+bal) ;

}

}

class Current extends Account

{

float deposit, withdraw, penalty;

public void deposit()

{

System.out.println("\nEnter Amount to be deposited: ");

deposit = s.nextFloat();

bal += deposit;

System.out.println("Balance: " + bal);

}

public void check\_Bal()

{

if (bal < 5000)

{

penalty = (0.1f \* bal);

System.out.println("\nInitial Account Balance: "+bal);

bal = bal-penalty;

System.out.println("\nLow balance!\nPenalty Amount: " + penalty + "\nAccount balance: " + bal);

}

else

{

System.out.println("\n Balance: " + bal);

}

}

public boolean check\_Bal\_part\_2()

{

if (bal < 5000)

{

penalty = (0.1f \* bal);

System.out.println("\nInitial Account Balance: "+bal);

bal = bal-penalty;

System.out.println("\nLow Balance!\nPenalty Amount: " + penalty + "\nAccount balance: " + bal);

return false;

}

return true;

}

public void withdraw()

{

System.out.println("\nEnter Amount to withdraw: ");

withdraw = s.nextFloat();

if(check\_Bal\_part\_2())

{

bal-=withdraw;

System.out.println("\nAmount Withdrawn: "+withdraw+"\nBalance: "+bal);

}

}

public void chequebook()

{

System.out.println("\nCheque Book has been Issued!");

}

}

public class Bank

{

public static void main(String[] args)

{

Scanner s = new Scanner(System.in);

String ch;

int n;

Current c = new Current();

Savings sa = new Savings();

System.out.println("\nEnter the Account Type (S for Savings , C for Current) : ");

ch = s.next();

switch(ch.toLowerCase())

{

case "s" : sa.input();

do

{

System.out.println("\n1. Deposit \n2. Withdrawal \n3. Check Balance \n4. Check Interest"

+"\n5. Show Account Details \n6. Exit Transaction\n\nEnter your choice: ");

n = s.nextInt();

switch(n)

{

case 1 : sa.deposit();

break;

case 2 : sa.withdraw();

break;

case 3 : sa.check\_Bal();

break;

case 4 : sa.interest();

break;

case 5 : sa.display();

break;

case 6 : System.out.println("\nExiting Transaction!");

System.exit(0);

break;

default : System.out.println("\nInvalid Operation");

}

}while(true);

case "c" : c.input();

do {

System.out.println("\n1. Deposit \n2. Withdrawal \n3. Check Balance \n4. Issue Cheque Book"

+ "\n5. Show Account Details \n6. Exit Transaction\n\nEnter your choice: ");

n = s.nextInt();

switch (n) {

case 1:

c.deposit();

break;

case 2:

c.withdraw();

break;

case 3:

c.check\_Bal();

break;

case 4:

c.chequebook();

break;

case 5:

c.display();

break;

case 6:

System.out.println("\nExiting Transaction!");

System.exit(0);

break;

default:

System.out.println("\nInvalid Operation");

}

}while(true);

default : System.out.println("\nInvalid Choice");

break;

}

}

}



