//ATM INTERFACE

import java.util.Scanner;

class BankAccount {

int balance;

int prevTransaction;

String customerName;

String customerId;

int flag = 0;

BankAccount(String cName, String cId) {

customerName = cName;

customerId = cId;

}

public final void clrscr() {

try {

try {

final String os = System.getProperty("os.name");

if (os.contains("Windows")) {

Runtime.getRuntime().exec("cls");

} else {

Runtime.getRuntime().exec("clear");

}

} catch (final Exception e) {

new ProcessBuilder("cmd", "/c", "cls").inheritIO().start().waitFor();

}

} catch (final Exception es) {

// System.out.println("nothing here!");

}

}

void checkId() {

clrscr();

System.out.println("WELCOME " + customerName);

System.out.println();

System.out.print("Please enter the Customer ID or PIN: ");

Scanner id = new Scanner(System.in);

String chk = id.nextLine();

if (chk.equals(customerId)) {

clrscr();

showMenu();

} else {

System.out.println("............................");

System.out.println("Wrong Login!!");

System.out.println("............................");

if (flag < 3) {

flag++;

checkId();

}

}

}

void deposit(int amount) {

if (amount != 0) {

balance = balance + amount;

prevTransaction = amount;

}

}

void withdraw(int amount) {

if (this.balance > amount) {

balance = balance - amount;

prevTransaction = -amount;

} else {

clrscr();

System.out.println("............................");

System.out.println("Sufficient Balance not available for the withdrawl!");

System.out.println("............................");

}

}

void getPrevTransaction() {

if (prevTransaction > 0) {

System.out.println("Deposited: " + prevTransaction);

} else if (prevTransaction < 0) {

System.out.println("Withdraw: " + Math.abs(prevTransaction));

} else {

System.out.println("No Transaction Occured ");

}

}

public void transfer(double amount, BankAccount acc) {

if (this.balance < amount) {

clrscr();

System.out.println("............................");

System.out.println("Transfer Fails due to insufficient balance!");

System.out.println("............................");

} else {

this.balance -= amount;

acc.balance += amount;

System.out.println("Account of " + this.customerName + " becomes $" + this.balance);

System.out.println("Account of " + acc.customerName + " becomes $" + acc.balance);

System.out.println("\n");

}

}

private void showMenu() {

char option;

Scanner sc = new Scanner(System.in);

System.out.println("Welcome " + customerName);

System.out.println("Your ID is " + customerId);

do {

System.out.println("\n");

System.out.println("\n");

System.out.println("A. Check Balance");

System.out.println("B. Deposit");

System.out.println("C. Withdraw");

System.out.println("D. Previous Transaction");

System.out.println("E. Transfer");

System.out.println("F. Exit");

System.out.println("............................");

System.out.println("Enter the option");

System.out.println("............................");

option = sc.next().charAt(0);

option = Character.toUpperCase(option);

System.out.println("\n");

switch (option) {

case 'A':

clrscr();

System.out.println("............................");

System.out.println("Balance " + balance);

System.out.println("............................");

System.out.println("\n");

break;

case 'B':

clrscr();

System.out.println("............................");

System.out.println("Enter the amount to deposit");

System.out.println("............................");

int amount = sc.nextInt();

deposit(amount);

System.out.println("\n");

break;

case 'C':

clrscr();

System.out.println("............................");

System.out.println("Enter the amount to withdraw");

System.out.println("............................");

int amount2 = sc.nextInt();

withdraw(amount2);

System.out.println("\n");

break;

case 'D':

clrscr();

System.out.println("............................");

getPrevTransaction();

System.out.println("............................");

System.out.println("\n");

break;

case 'E':

clrscr();

System.out.println("............................");

System.out.println("To whom");

BankAccount bb = new BankAccount("Aarti", "1003");

System.out.println(bb.customerName);

System.out.println("............................");

System.out.println("Amount to Transfer");

double am = sc.nextDouble();

System.out.println("............................");

transfer(am, bb);

break;

case 'F':

clrscr();

System.out.println("............................");

break;

default:

clrscr();

System.out.println("Invalid Option!!! Please Enter Again");

}

} while (option != 'F');

System.out.println("ThankYou For using our services");

}

}

public class ATMInterface {

public static void main(String[] args) {

BankAccount ba = new BankAccount("KajalKamble", "3456");

ba.checkId();

}

}