JAVA LAB PROGRAM

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Write a java program that tracks the details of bank customers and captures the state of each customer. program should include a class called bank add the required data members for tracking the customer details. Use a object Serialization and deserialization to the same.Program should prevent from capturing the account balance of the customer during the Serialization Concept.

Programs

Customer.java

import java.io.Serializable;

class Customer implements Serializable{

int accno;

String name;

transient int balance;

public Customer(String name, int accno, int balance){

this.name = name;

this.accno = accno;

this.balance = balance;

}

}

Bank.java

import java.io.\*;

import java.util.Scanner;

import java.io.InputStreamReader;

import java.io.FileInputStream;

import java.util.ArrayList;

public class Bank{

public static void main(String... args){

Scanner sc = new Scanner(System.in);

int i = 0;

Customer[] obj = new Customer[10];

while(true){

System.out.print("1. Run\n2. Exit\nEnter choice: ");

int n = sc.nextInt();

if(n == 1){

System.out.print("Customer name: ");

String name = sc.next();

System.out.print("Account number: ");

int accno = sc.nextInt();

System.out.print("Balance amount: ");

int balance = sc.nextInt();

obj[i] = new Customer(name, accno, balance);

i++;

}

else if(n == 2){

break;

}

}

try{

FileOutputStream fout = new FileOutputStream("f.txt");

ObjectOutputStream out = new ObjectOutputStream(fout);

for(int j = 0; j < i; j++){

out.writeObject(obj[j]);

}

out.flush();

out.close();

System.out.print("Done\n");

}

catch(Exception e){

System.err.print(e);

}

try{

int k = 1;

ArrayList<Customer> metaData = new ArrayList<>();

FileInputStream fileInputStream = new FileInputStream("f.txt");

ObjectInputStream objectInputStream = new ObjectInputStream(fileInputStream);

System.out.println("\nCustomer details:");

for(int j = 0; j < i;i++){

Customer customer = (Customer) objectInputStream.readObject();

metaData.add(customer);

System.out.print(k);

System.out.print("\nName: "+customer.name);

System.out.print("\nAccount Number: "+customer.accno);

k++;

try{

System.out.print("\nBalance: "+customer.balance+"\n");

}

catch(Exception e){

System.out.print(e+"\n");

}

}

}

catch(Exception e){

System.err.print(e);

}

}

}

Output

