3-9

import java.util.Comparator;  
import java.util.Scanner;  
import java.util.TreeSet;  
  
public class assignment309 {  
 public static void main(String[] args)  
 {  
 TreeSet<SavingAccount> savingAccounts = new TreeSet<>(Comparator.*comparing*(SavingAccount::getAcc\_ID));  
 Scanner scan= new Scanner(System.*in*);  
  
 savingAccounts.add(new SavingAccount(30.0,3,"h1",true));  
 savingAccounts.add(new SavingAccount(25.0,2,"h2",false));  
  
 BankAccountList b =new BankAccountList(savingAccounts);  
  
 System.*out*.print("Enter the number of savings accounts : ");  
 int number=scan.nextInt();  
  
 for (int i=0;i<number;i++){  
  
 System.*out*.print("Enter the account ID : ");  
 int id=scan.nextInt();  
  
 System.*out*.print("Enter the account balance : ");  
 double account=scan.nextDouble();  
  
 System.*out*.print("Enter the account holder name : ");  
 String name=scan.next();  
  
 System.*out*.print("Enter is it salary account or not : ");  
 boolean accType=scan.nextBoolean();  
  
 b.addSavingAccount(new SavingAccount(account,id,name,accType));  
 }  
  
 b.displaySavingAccountIds().forEach(f -> System.*out*.println(f));  
 scan.close();  
 }  
}

public class SavingAccount extends assignment309 {  
 private double acc\_balance;  
 private int acc\_ID;  
 private String accountHolderName;  
 private boolean isSalaryAccount;  
  
 public SavingAccount(double acc\_balance, int acc\_ID, String accountHolderName, boolean isSalaryAccount) {  
 super();  
 this.setAcc\_balance(acc\_balance);  
 this.acc\_ID = acc\_ID;  
 this.setAccountHolderName(accountHolderName);  
 this.setSalaryAccount(isSalaryAccount);  
 }  
  
 public int getAcc\_ID() {  
 return acc\_ID;  
 }  
  
 public String getAccountHolderName() {  
 return accountHolderName;  
 }  
  
 public void setAccountHolderName(String accountHolderName) {  
 this.accountHolderName = accountHolderName;  
 }  
  
 public double getAcc\_balance() {  
 return acc\_balance;  
 }  
  
 public void setAcc\_balance(double acc\_balance) {  
 this.acc\_balance = acc\_balance;  
 }  
  
 public boolean isSalaryAccount() {  
 return isSalaryAccount;  
 }  
  
 public void setSalaryAccount(boolean isSalaryAccount) {  
 this.isSalaryAccount = isSalaryAccount;  
 }  
  
 public double withdraw(double x) {  
 if (acc\_balance < x)  
 return -1;  
 else {  
 acc\_balance -= x;  
 return acc\_balance;  
 }  
 }  
  
 public double deposit(double x) {  
 acc\_balance += x;  
 return acc\_balance;  
 }

mport java.util.ArrayList;  
import java.util.Comparator;  
import java.util.List;  
import java.util.TreeSet;  
  
public class BankAccountList {  
 private TreeSet<SavingAccount> savingAccounts = new TreeSet<>(Comparator.*comparing*(SavingAccount::getAcc\_ID));  
  
 public BankAccountList()  
 {  
 super();  
  
 }  
  
 public BankAccountList(TreeSet<SavingAccount> savingAccounts)  
 {  
 this.savingAccounts = savingAccounts;  
 }  
  
 int a= savingAccounts.size();  
  
 public boolean addSavingAccount(SavingAccount savingAccount) {  
 savingAccounts.add(savingAccount);  
 int b= savingAccounts.size();  
 if (b==a)  
 return false;  
 return true;  
 }  
  
 public List<Integer> displaySavingAccountIds() {  
 List<Integer> list = new ArrayList<>();  
 savingAccounts.stream().forEach(e -> list.add(e.getAcc\_ID()));  
 return list;  
 }  
}