高级语言程序设计实验报告

1. 账户对象创建

源代码：

class Account1{

protected int id=0;

protected double balance=0;

protected double annualInterestRate=0;

private java.util.Date dateCreated=new java.util.Date();

public Account1(){

}

public Account1(int newid,int newbalance){

id=newid;

balance=newbalance;

}

public int getid(){

return id;

}

public double getbalance(){

return balance;

}

public double getannualInterestRate(){

return annualInterestRate;

}

public void setid(int newid){

id=newid;

}

public void setbalance(double newbalance){

balance=newbalance;

}

public void setannualInterestRate(double newannualInterestRate){

annualInterestRate=newannualInterestRate;

}

public double getMonthlyInterest(){

return (annualInterestRate/12)/100;

}

public String getdateCreated(){

return dateCreated.toString();

}

public void withDraw(double draw){

balance-=draw;

}

public void deposit(double draw){

balance+=draw;

}

}

1. 创建满足条件的新的account类

源代码：

package accounttest;

import java.util.\*;

public class AccountTest {

public static void main(String[] args) {

Account AI=new Account("George",1122,1000);

AI.annualInterestRate=1.5;

AI.deposit(30);

AI.deposit(40);

AI.deposit(50);

AI.withDraw(5);

AI.withDraw(4);

AI.withDraw(2);

System.out.println("name: "+AI.name+"\nannualInterestRate: "+AI.annualInterestRate

+"\nbalance: "+AI.balance);

System.out.println(AI.transactions.size());

for(int i=0;i<AI.transactions.size();i++){

System.out.println(AI.transactions.get(i));

}

}

}

class Account extends Account1{

String name;

Account(){}

Account(String name,int id,int balance){

this.name=name;

this.id=id;

this.balance=balance;

}

ArrayList<String> transactions=new ArrayList<>();

@Override

public void deposit(double draw){

balance+=draw;

transactions.add("D "+" "+draw+" "+balance+" deposit"+draw);

}

@Override

public void withDraw(double draw){

balance-=draw;

transactions.add("W "+" "+draw+" "+balance+" withDraw"+draw);

}

}

class transactions{

private java.util.Date date;

private char type;

private double amount;

private double balance;

private String description;

transactions(char type,double amount,double balance,String description){

this.type=type;

this.amount=amount;

this.balance=balance;

this.description=description;

}

}

class Account1{

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protected double balance=0;

protected double annualInterestRate=0;

private java.util.Date dateCreated=new java.util.Date();

public Account1(){

}

public Account1(int newid,int newbalance){

id=newid;

balance=newbalance;

}

public int getid(){

return id;

}

public double getbalance(){

return balance;

}

public double getannualInterestRate(){

return annualInterestRate;

}

public void setid(int newid){

id=newid;

}

public void setbalance(double newbalance){

balance=newbalance;

}

public void setannualInterestRate(double newannualInterestRate){

annualInterestRate=newannualInterestRate;

}

public double getMonthlyInterest(){

return (annualInterestRate/12)/100;

}

public String getdateCreated(){

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balance-=draw;

}

public void deposit(double draw){

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}

}

运行结果：

