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import java.util.ArrayList;
import java.util.Date;
public class Account {
    private int id;
    private double balance;
    private double annualInterestRate;
    private Date dateCreated = new Date();
    private String name;
    private ArrayList<Transaction> transactions = new ArrayList<>();
    public Account(){
    }
    public Account(String name, int id,double balance){
        this.name = name;
        this.id = id;
        this.balance = balance;
    }
    public Account(int id,double balance){
        this.id = id;
        this.balance = balance;
    }
    public double getMonthlyInterestRate(){
        return annualInterestRate/12;
    }
    public double getMonthlyInterest(){
        return balance * getMonthlyInterestRate()/100;
    }
    public void withdraw(double amount){
        if (amount > balance) {
            System.out.println("*****
*****");
            System.out.println("Withdraw :"+ amount + " You can't withdraw
because not have enough money");
            System.out.println("*****
*****");
        }
        else{
            if (amount > 0) {
                balance -= amount;
                transactions.add(new Transaction('W', amount, balance, ""));
            }
            else{
                System.out.println("*****
*****");
                System.out.println("Withdraw :"+ amount + " Error!!! please try it
again");
            }
        }
    }
}

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

public void deposit(double amount){
    balance += amount;
    transactions.add(new Transaction('D', amount, balance, ""));
}

public int getId() { //accessor(get)
    return id;
}

public void setId(int id) { //mutator(set)
    this.id = id;
}

public double getBalance() {
    return balance;
}

public void setBalance(double balance) {
    this.balance = balance;
}

public double getAnnualInterestRate() {
    return annualInterestRate;
}

public void setAnnualInterestRate(double annualInterestRate) {
    this.annualInterestRate = annualInterestRate;
}

public Date getDateCreated() {
    return dateCreated;
}

public String getName() {
    return name;
}

public void setName(String name) {
    this.name = name;
}

public ArrayList<Transaction> getTransactions() {
    return transactions;
}
}

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