import java.util.\*;

public class BillSettlement {

public static void main(String[] args) {

Map<String, Integer> balances = new HashMap<>();

List<Bill> bills = new ArrayList<>();

// Add bills to the list

bills.add(new Bill("Lunch", 2000, "Balaji", Arrays.asList("Anand", "Balaji", "Chaitanya", "Divya")));

bills.add(new Bill("Movie ticket", 1000, "Anand", Arrays.asList("Anand", "Balaji", "Chaitanya", "Divya")));

bills.add(new Bill("Snacks", 500, "Chaitanya", Arrays.asList("Anand", "Balaji", "Chaitanya")));

// Calculate balances

for (Bill bill : bills) {

String paidBy = bill.getPaidBy();

int totalAmount = bill.getTotalAmount();

List<String> sharedBy = bill.getSharedBy();

int sharePerPerson = totalAmount / sharedBy.size();

// Add amount to paidBy person

if (!balances.containsKey(paidBy)) {

balances.put(paidBy, totalAmount);

} else {

balances.put(paidBy, balances.get(paidBy) + totalAmount);

}

// Subtract amount from sharedBy persons

for (String person : sharedBy) {

if (!person.equals(paidBy)) {

if (!balances.containsKey(person)) {

balances.put(person, -sharePerPerson);

} else {

balances.put(person, balances.get(person) - sharePerPerson);

}

}

}

}

// Print balances

for (Map.Entry<String, Integer> entry : balances.entrySet()) {

String person = entry.getKey();

int balance = entry.getValue();

System.out.println(person + " owes " + (-balance) + " to others.");

}

}

}

class Bill {

private String description;

private int totalAmount;

private String paidBy;

private List<String> sharedBy;

public Bill(String description, int totalAmount, String paidBy, List<String> sharedBy) {

this.description = description;

this.totalAmount = totalAmount;

this.paidBy = paidBy;

this.sharedBy = sharedBy;

}

public String getDescription() {

return description;

}

public int getTotalAmount() {

return totalAmount;

}

public String getPaidBy() {

return paidBy;

}

public List<String> getSharedBy() {

return sharedBy;

}

}