银行模拟程序

- 客户可以开立账户
- 客户可以从账户存入/取出资金
- 客户可以请求显示其每个帐户的交易和总计的报表
- 不同的账户以不同的方式计算利息
- 支票账户的固定利率为 0.1%
- 储蓄账户的前 1000 美元的利率为 0.1%, 然后为 0.2%
- Maxi-Savings 账户的前 1000 美元的费率为 2%,接下来的 1,000 美元的费率为 5%,然后 是 10%
- 银行经理可以获得一份报告,显示客户列表以及他们拥有的帐户数量
- 银行经理可以获得一份报告,显示银行在所有账户上支付的利息总额
- getStatement 不需要考虑 MAXI_SAVINGS 类型账户

0为支票账户 1为储蓄账户 2为 Maxi-Savings 账户

输入命令说明

createAccount type	type 取值 0,1,2 创建对应类型的银行账号	
createCustomer name	name 是字符串,创建户名为 name 的银行用户	
addToCustomer index name	index 是根据 account 的创建次序索引到银行账号,	
	将对应的银行账号挂在名为 name 的用户名下	
accountDeposit index amount	在指定的银行账号下存入 amount 数量的钱	
accountWithdraw index amount	在指定的银行账号下去除 amount 数量的钱	
sumTransactions index	获取指定银行账号的余额	
numberOfAccount name	获取指定用户名下的账号数量	
totalInterestEarned name	获取指定用户的利息收入	
getStatement name	获取指定用户的所有交易信息	
banktotalInserstPaid	获取银行需要支付的利息总额	
customsum	获取用户统计	
end	输入结束标志	

1_account createCustomer Bill createAccount 0 addToCustomer 0 Bill accountWithdraw 0 -100.0 end amount must be greater than zero

2_account	
createCustomer Bill	
createAccount 0	
addToCustomer 0 Bill	

accountWithdraw 0 100.0 end
sumTransactions must be greater than zero

3_account

end

createCustomer Bill createAccount 0 addToCustomer 0 Bill accountDeposit 0 -100.0

amount must be greater than zero

4_account

createCustomer Bill
createAccount 2
addToCustomer 0 Bill
accountDeposit 0 1400.0
accountWithdraw 0 700.0
sumTransactions 0
end

700.0

5_bank

createCustomer John createAccount 0 addToCustomer 0 John customsum end

Customer Summary
- John (1 account)

6_bank

createAccount 0
createAccount 1
createCustomer Bill
createCustomer Tim

addToCustomer 0 Bill
addToCustomer 1 Tim
accountDeposit 0 100.0
accountDeposit 0 1000.0
banktotalInserstPaid
end

1.1

7_bank

createAccount 1
createCustomer Bill
addToCustomer 0 Bill
accountDeposit 0 1500.0
banktotalInserstPaid
end

2.0

8_bank

createAccount 2 createCustomer Bill addToCustomer 0 Bill accountDeposit 0 3000.0 banktotalInserstPaid end

170.0

9_bank

createCustomer John
createCustomer Jack
createAccount 0
createAccount 1
addToCustomer 0 John
addToCustomer 1 John
createAccount 2
addToCustomer 2 Jack
customsum
end

Customer Summary

- John (2 accounts)
- Jack (1 account)

10_customer

createAccount 0

createAccount 1

createCustomer Henry

addToCustomer 0 Henry

addToCustomer 1 Henry

accountDeposit 0 100.0

accountDeposit 1 4000.0

accountWithdraw 1 200.0

getStatement Henry

end

Statement for Henry

Checking Account

deposit \$100.00

Total \$100.00

Savings Account

deposit \$4000.00

withdrawal \$200.00

Total \$3800.00

Total In All Accounts \$3900.00

11_customer

createAccount 2

createAccount 1

createCustomer Bill

addToCustomer 0 Bill

addToCustomer 1 Bill

accountDeposit 0 3000.0

accountDeposit 1 1000.0

totalInterestEarned Bill

end

171.0