

```

#ifndef _ACCOUNT_HPP_
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#include <vector>
#include <algorithm>
#include <iterator>

#include "transaction.hpp"

#define BEGIN_ACCOUNT "BACCT"

/**
 * This class defines a money account which stores financial transactions
 * and maintains a balance.
 */
class Account {
    std::string name;
    std::vector<Transaction> transactions;

public :
    Account() : name({}), transactions({}) {}
    Account(const std::string& name) : name(name), transactions({}) {}

    const std::string& getName() const {
        return name;
    }

    const std::vector<Transaction>& getTransactions() const {
        return transactions;
    }

    void addTransaction(Transaction& t) {
        transactions.push_back(t);
    }

    long double balance() const {
        long double sum = 0;
        sum = std::accumulate(std::begin(transactions), std::end(transactions), sum,
            [](const long double& a, const Transaction& b) {
                return a + b.getAmount();
            });

        return sum;
    }

    friend std::ostream& operator<<(std::ostream& os, const Account& a);
    friend std::istream& operator>>(std::istream& is, Account& a);
};

std::ostream& operator<<(std::ostream& os, const Account& a) {
    os << BEGIN_ACCOUNT << " "
        << a.name << "\n";

    return os;
}

std::istream& operator>>(std::istream& is, Account& a) {
    is >> a.name;
    return is;
}

#endif

```