



### bank\_account.cpp

```

#include <iostream>
#include <fstream>
#include <string>
#include <iomanip>
using namespace std;
const string transaction_file = "transactions.txt";
class bank_account {
private:
    double balance;
    void saveTransaction(const string& type, double amount, const string& item = "") {
        ofstream outFile(transaction_file, ios::app);
        if (outFile.is_open()) {
            outFile << fixed << setprecision(2);
            if (type == "deposit") {
                outFile << "Deposit: +" << amount << "New balance: " << balance << endl;
            } else if (type == "purchase") {
                outFile << "Purchase: -" << amount << "(" << item << ")" new balance: " << balance << endl;
            } else if (type == "initial deposit") {
                outFile << "Initial deposit: +" << amount << " new balance: " << balance << endl;
            }
            outFile.close();
        } else {
            cout << "error: cannot open file" << endl;
        }
    }
}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

- isabellalynnabetong@Isabellas-MacBook-Air cis25 % g++ bank\_account.cpp -std=c++17 -o bank\_account
- isabellalynnabetong@Isabellas-MacBook-Air cis25 % ./bank\_account

Account created with initial balance: \$500.00  
deposit: \$150.75. New balance: \$650.75  
Purchased: Gold bean cafe for \$25.50. new balance: \$625.25  
deposit: \$200.00. New balance: \$825.25  
Transaction failed: insufficient funds for Apple laptop.  
Purchased: trader joes for \$50.00. new balance: \$775.25  
Final account balance: \$775.25

Transaction history from (transactions.txt)  
Deposit: +150.75New balance: 650.75  
Purchase: -25.50 (Gold bean cafe) new balance: 625.25  
Deposit: +200.00New balance: 825.25  
Purchase: -50.00 (trader joes) new balance: 775.25  
Deposit: +150.75New balance: 650.75  
Purchase: -25.50 (Gold bean cafe) new balance: 625.25  
Deposit: +200.00New balance: 825.25  
Purchase: -50.00 (trader joes) new balance: 775.25

- isabellalynnabetong@Isabellas-MacBook-Air cis25 %