Screenshot 1 and 2 : Program code running

```cpp
1    #include <iostream>
2    #include <fstream>
3    #include <string>
4    using namespace std;
5    class BankAccount {
6    private:
7        double balance;
8
9    public:
10       BankAccount() { balance = 0.0; }
11
12       void deposit(double amount) {
13           balance += amount;
14           cout << "Deposited: $" << amount << endl;
15           saveTransaction("Deposit", amount);
16       }
17
18       void makePurchase(const string &item, double cost) {
19           if (cost > balance) {
20               cout << "Insufficient funds for " << item << endl;
21               saveTransaction("FAILED Purchase - " + item, cost);
22           } else {
23               balance -= cost;
24               cout << "Purchased: " << item << " for $" << cost << endl;
25               saveTransaction("Purchase - " + item, cost);
26           }
27       }
28       void displayBalance() {
29           cout << "Current Balance: $" << balance << endl;
30       }
31
32       void saveTransaction(const string &type, double amount) {
33           ofstream file("transactions.txt", ios::app);
34           if (file.is_open()) {
35               file << type << ": $" << amount << endl;
36               file.close();
37           }
38       }
```

```cpp
39   };
40
41   // helper: print the transactions.txt to console
42   void printTransactionsFile() {
43       ifstream file("transactions.txt");
44       if (!file.is_open()) {
45           cout << "No transactions file found." << endl;
46           return;
47       }
48       cout << "\n--- transactions.txt contents ---\n";
49       string line;
50       while (getline(file, line)) {
51           cout << line << endl;
52       }
53       cout << "-------------------------------\n";
54       file.close();
55   }
56
57   int main() {
58       // Remove old transactions file for a clean run (optional)
59       // Comment out the next two lines if you want to append to previous runs:
60       std::remove("transactions.txt");
61
62       BankAccount myAccount;
63       cout << "=== Bank Account Simulation ===" << endl;
64
65       myAccount.deposit(200.00);                   // Starting deposit
66       myAccount.makePurchase("Coffee", 5.25);      // Purchase 1
67       myAccount.makePurchase("Shoes", 49.99);      // Purchase 2
68       myAccount.displayBalance();                  // Print final balance
69
70       cout << "Transactions saved to transactions.txt" << endl;
71
72       // Print the transactions file contents so you can screenshot it
73       printTransactionsFile();
74
75       return 0;
76   }
```

Screenshot 3: Program code bank Deposited

Output   Generated files

=== Bank Account Simulation ===
Deposited: $200

Screenshot 4: First purchase

Purchased: Coffee for $5.25
Purchased: Shoes for $49.99

Screenshot 5: Final balance

Current Balance: $144.76

Transactions saved to transactions.txt