BackEnd Whitebox Testing: Withdraw

Source Listing

Withdraw method

```
224         private static void withdraw(String accountNumber, int amount, String accountName) {
225             Account tempAccount = accounts.get(accountNumber);
226             if (!tempAccount.getAccountName().equals(accountName)) {
227                 System.out.println("Failed Constraint Log: the name given in a withdraw transaction" +
228                         " must match the name associated with the withdrawing account");
229                 return;
230             }
231             if (tempAccount.getBalance() - amount < 0) {
232                 System.out.println("Failed Constraint Log: no account should ever have a negative balance");
233             } else {
234                 tempAccount.setBalance(tempAccount.getBalance() - amount);
235             }
236         }
```

Lines 225-236 (total 3 cases)

Analysis

Test method: Basic Block Testing

Test Case	Lines to cover (excludes lines of just syntax)	Test File 1	Test File 2
1	224-229	"oldMasterAccounts.txt"	"mergedTransactionSummaryFile1.txt"
2	224-226, 231-232, 236	"oldMasterAccounts.txt"	"mergedTransactionSummaryFile2.txt"
3	224-226, 233-234, 236	"oldMasterAccounts.txt"	"mergedTransactionSummaryFile3.txt"

Test Inputs

Test Case 1

mergedTransactionSummaryFile1.txt
```
WDR 1234567 50000 0000000 BILLY
EOS
EOS
```

OldMasterAccounts.txt
```
7654321 100 BILLY
1234567 100000 MICHAEL
```

Test Case 2

mergedTransactionSummaryFile2.txt
```
WDR 7654321 50000 0000000 BILLY
EOS
EOS
```

OldMasterAccounts.txt
```
7654321 100 BILLY
1234567 100000 MICHAEL
```

Test Case 3

mergedTransactionSummaryFile3.txt
```
WDR 1234567 50000 0000000 MICHAEL
EOS
EOS
```

OldMasterAccounts.txt
```
7654321 100 BILLY
1234567 100000 MICHAEL
```

Test Report

Test Case	Result
1	Ran as expected and hit every line as expected
2	Ran as expected and hit every line as expected
3	Ran as expected and hit every line as expected