

# CISC 327 Assignment 5 Withdraw Test Report

## Source Listing:

For this test, path testing will be used to test the withdrawal function of the back office. Withdrawing from an account is implemented as depositing a negative amount to it, to minimize unnecessary code reuse:

```
1. def withdraw(self, number, balance):
2.     self.deposit(number, - int(balance))
3.     pass
```

Therefore, testing withdraw really means testing deposit. The body of withdraw is as follows:

```
1. def deposit(self, number, balance):
2.     for count, account in enumerate(self.account_list):
3.         if account[0] == number:
4.             account[1] = account[1] + balance
5.             if account[1] < 0:
6.                 sys.stdout.write('Error: account has negative balance.')
7.                 break
8.     pass
```

## Test Cases:

Decision Path	X input	Y input	Z input (account list)	Test	x	y	z
1,2,3,8	2222222	1300	[1111111, 2345678, 2000]	T1	2222222	1300	[1111111, 2345678, 2000]
1,2,3,4,5, 7,8	1111111	1300	[1111111, 2345678, 2000]	T2	1111111	1300	[1111111, 2345678, 2000]
1,2,3,4,5, 6,7,8	1111111	2300	[1111111, 2345678, 2000]	T3	1111111	2300	[1111111, 2345678, 2000]

**T1:** Checks what happens if the desired account to withdraw from does not exist; in this case nothing should happen.

**T2:** Checks to see if valid withdrawals, ie where account numbers match and the account has sufficient funds, are allowed.

**T3:** Checks to see if attempting to withdraw more funds from an account than it possesses is allowed; it should fail and produce an error message to the console.

### **Sample Test Cases:**

WDR 2222222 1300 Test 1

WDR 1111111 1300 Test 2

WDR 1111111 2300 Test 3

In addition to the test input file, the following **master\_account\_list.txt** file will be used in tests to check the validity of withdrawal operations

1111111 2000 aaa

0000000

### **Test Report:**

Test Number	Test Name	Purpose	Failure	Changes
T1	Nonexistent Account Number	Checks to see if withdrawals from nonexistent accounts are not processed	Successful test	(-)
T2	Valid Withdrawal	Checks to see if legal withdrawals from real accounts are processed	Successful test	(-)
T3	Invalid Withdrawal	Checks to see if withdrawals that would leave the account with below zero balance are forbidden and print an error	An error is printed to the console, but the transaction is processed anyway. This affects both withdrawal and transfer operations.	Check for negative balance is made before the account balance is changed; additionally, transfer operations will not continue if the withdrawal fails.

