Five Documented Program Scenarios

1. A customer logs onto the system to view their account balance

```
[Erics-MacBook-Pro:Assignment_Bachmeier Eric$ ./bank

Welcome to my Banking System

By: Eric Bachmeier

0 - MAINTENANCE PERSON
1 - MANAGER

Enter a valid login ID (9 to quit): 11114

Welcome, Eric!

Please be advised you are $78.32 in debt currently.
Your next bill will be for $7.83.
You are set to automatically make a payment in 21 days.

What can we do for you, Eric?
1  - Close a chequing account
2  - Close a savings account
3  - Deposit
4  - Withdraw
5  - View Balances
6  - Transfer Money
7  - Make a purchase
8  - View Purchases
9  - Switch payment plan
10 - Logout

5
---------------------------------------------
Chequing Balance is $3000.00

Savings Balance is $44.00
---------------------------------------------
```

2. A manager views all the accounts with a filter looking for a specific account number

```
Welcome to my Banking System

By: Eric Bachmeier

0 - MAINTENANCE PERSON
1 - MANAGER

Enter a valid login ID (9 to quit): 1

Welcome Manager!

What can we do for you, Manager?
1 - Create an account
2 - Delete an account
3 - Display one account
4 - Display all accounts
5 - Display failed transactions
6 - Logout

4
How would you like to filter the accounts? (0 to cancel)
1 - Account number
2 - Last name
1
----------------------------------------
Name:              Kevin Hart
Account Number:    11111
Chequing Balance: $7266.81
Savings Balance:   $91.00
Debt Owing:        $1158.75
----------------------------------------
Name:              Alyssa Manicom
Account Number:    11112
Chequing Balance: $89.33
Savings Balance:   $8331.00
Debt Owing:        $0.00
----------------------------------------
Name:              Sidney Crosby
Account Number:    11113
Chequing Balance: $7316.72
Savings Balance:   $9374.66
Debt Owing:        $0.00
----------------------------------------
Name:              Eric Bachmeier
Account Number:    11114
Chequing Balance: $3000.00
Savings Balance:   $44.00
Debt Owing:        $78.32
```

3. A customer transferring a sum of $55.00 from their chequing to savings account

```
Welcome to my Banking System

By: Eric Bachmeier

0 - MAINTENANCE PERSON
1 - MANAGER

Enter a valid login ID (9 to quit): 11114

Welcome, Eric!

Please be advised you are $78.32 in debt currently.
Your next bill will be for $7.83.
You are set to automatically make a payment in 19 days.

What can we do for you, Eric?
1   - Close a chequing account
2   - Close a savings account
3   - Deposit
4   - Withdraw
5   - View Balances
6   - Transfer Money
7   - Make a purchase
8   - View Purchases
9   - Switch payment plan
10 - Logout

6

Which account would you like to transfer money from? (3 to cancel)
1 - Chequing
2 - Savings

1

How much money do you wish to transfer from chequing? (0 to cancel)
55
$55.00 was successfully transferred from your chequing account.
Your new balances are as follows:
Chequing $2945.00
Savings $99.00
```

4. The maintenance person viewing the execution trace of the last documented operation (3)

```
Enter a valid login ID (9 to quit): 0

Welcome Maintenance Person!

What can we do for you?
1 - Toggle execution trace feature
2 - Print execution trace to screen
3 - Clear all execution traces
4 - Logout
2

Execution Traces
------------------------------------
10/11/2015 22:09:08 --- Processing integer input

10/11/2015 22:09:10 --- User entered valid number --> 4 <--

10/11/2015 22:09:10 --- Maintenance selected to logout

10/11/2015 22:09:10 --- Processing integer input

10/11/2015 22:09:20 --- User entered valid number --> 11114 <--

10/11/2015 22:09:20 --- Logged in as 11114

10/11/2015 22:09:20 --- Processing integer input

10/11/2015 22:09:23 --- User entered valid number --> 6 <--

10/11/2015 22:09:23 --- 11114 selected transfer

10/11/2015 22:09:23 --- Processing integer input

10/11/2015 22:09:24 --- User entered valid number --> 1 <--

10/11/2015 22:09:24 --- 11114 selected to transfer funds from their chequing account

10/11/2015 22:09:24 --- Processing input as double

10/11/2015 22:09:25 --- User entered valid double --> 55.000000 <--

10/11/2015 22:09:25 --- 11114 entered a valid transfer amount

10/11/2015 22:09:25 --- There will not be a bank fee for client number 11114

10/11/2015 22:09:25 --- 11114 successfully transferred $55.000000 without a fee

10/11/2015 22:09:25 --- Processing integer input
```

5. A customer tries to withdraw funds which they do not have

```
Welcome to my Banking System

By: Eric Bachmeier

0 - MAINTENANCE PERSON
1 - MANAGER

Enter a valid login ID (9 to quit): 11114

Welcome, Eric!

Please be advised you are $78.32 in debt currently.
Your next bill will be for $7.83.
You are set to automatically make a payment in 17 days.

What can we do for you, Eric?
1  - Close a chequing account
2  - Close a savings account
3  - Deposit
4  - Withdraw
5  - View Balances
6  - Transfer Money
7  - Make a purchase
8  - View Purchases
9  - Switch payment plan
10 - Logout

4

Which account would you like to withdraw funds from? (3 to cancel)
1 - Chequing
2 - Savings

1

How much money do you wish to withdraw from your chequing account? (0 to cancel)
3000

Error: Insufficient funds, you only have $2945.00 in your chequing account.

How much money do you wish to withdraw from your chequing account? (0 to cancel)
```