

TestCases:

Create accountname:

(We used sleep in order to test the bank mutex correctly)

Case 1: Testing 2 accounts creating about same time, output from 2nd perspective

Input: create Vikram(1st)
create Joe(different terminal, 1-3 seconds after)

Expected Output: Currently the bank is printing out information or another account is made, so no new account can be created currently
(5-10 seconds later)
The account was created successfully

Actual:

Currently the bank is printing out information or another account is made, so no new account can be created currently
(5-10 seconds later)
The account was created successfully

For this case, we made account Vikram first then Joe and the second account should wait till the first is done

Case 2: Creating same accountname twice

Input: create Vikram(1st)
create Vikram(2nd)

Expected Output: Error, another account with the same name already exists in the bank account, try to serve it instead

Actual Output: Error, another account with the same name already exists in the bank account, try to serve it instead

Case 3: Create one account

Input: create Vik

Expected Output: The account was created successfully

Actual Output: The account was created successfully

Case 4: Creating more than 20 accounts

Input: (create 20 random accounts)
create Vikram

Expected Output: Sorry, max number of accounts reached

Actual Output: Sorry, max number of accounts reached

Serve accountname:

Case 1: Testing 2 clients trying to serve same account, output from second customer view

Input: Serve Vik(1st)
Serve Vik(2nd)
end Vik(1st, about 20 seconds)

Expected Output: another client is performing a customer session for this account, you are currently waiting in the queue, do not enter any commands till a confirmation messages till you do so, problems may occur from entering commands prematurely

another client is performing a customer session for this account, you are currently waiting in the queue, do not enter any commands till a confirmation messages till you do so, problems may occur from entering commands prematurely

another client is performing a customer session for this account, you are currently waiting in the queue, do not enter any commands till a confirmation messages till you do so, problems may occur from entering commands prematurely

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another client is performing a customer session for this account, you are currently waiting in the queue, do not enter any commands till a confirmation messages till you do so, problems may occur from entering commands prematurely

Congrats, you are now in a customer session, you may enter commands

Case 2: Deposit, withdraw, query across 2-3 clients

Input: Serve Vik(1st client)
Deposit 500(1st client)
end(1st client)
Serve Vik(2nd client)
Withdraw 250(2nd client)
end(2nd client)
Serve vik(3rd client)
Query(3rd client)
end(3rd client)

Expected Output: The deposit of 500.00 was successful(1st)
The withdrawl of 250.00 is good (2nd)
The current balance is 250.00(3rd)

Actual Output: The deposit of 500.00 was successful(1st)
The withdrawl of 250.00 is good (2nd)
The current balance is 250.00(3rd)

Case 3: Invalid Deposit and Withdraw(same session from case 2)

Input: Deposit www
Withdraw 2500
Query

Expected Output: Invalid amount, either less than 0 or letter
The amount you entered was greater than current balance
The current balance is 0

Actual Output: Expected Output: Invalid amount, either less than 0 or letter
The amount you entered was greater than current balance
The current balance is 0

Case 4: Incorrect serve account

Input: serve vik(doesnt exist)

Expected Output: Error, wrong bank account name has been entered
Press end to leave this prompt and return to the main prompt

Actual Output: Error, wrong bank account name has been entered
Press end to leave this prompt and return to the main prompt

Case 5: Attempting to use serve commands before serve prompt

Input: deposit vik

Expected Output: You arent in a serve session, these commands are invalid

Actual Output: You arent in a serve session, these commands are invalid