

File 1

Test Name	What is being tested	Expected Output
Test 1 - apply_transaction_fee_withdrawal	Check correct fee is applied for withdrawals	Deducts \$0.50
Test 2 - apply_transaction_fee_transfer	Check correct fee is applied for transfers	Deducts \$1.00
Test 3 - apply_transaction_fee_no_fee	Check no fee is applied for deposits	No fee deducted
Test 4 - apply_transaction_fee_overdraft	Check if balance goes negative, overdraft fee is applied	Deducts additional \$5.00
Test 5 - process_deposit_valid	Check deposit is greater than 0	Transaction succeeds
Test 6 - process_deposit_negative	Check if deposit of $\leq 0$ is rejected	"Deposit amount must be positive."
Test 7 - process_deposit_correct_amount	Check if correct amount is added to account	Balance updated correctly
Test 8 - process_withdrawal_valid	Check withdrawal is greater than 0	Transaction succeeds

<b>Test 9 -</b> process_withdrawal_negative	Check if withdrawal of $\leq 0$ is rejected	"Withdrawal amount must be positive."
<b>Test 10 -</b> process_withdrawal_sufficient_balance	Check if withdrawal succeeds when balance is sufficient	Transaction succeeds
<b>Test 11 -</b> process_withdrawal_insufficient_funds	Check if withdrawal fails when balance is insufficient	"Insufficient funds for withdrawal."
<b>Test 12 -</b> process_withdrawal_fee_applied	Check if withdrawal fee is deducted	Deducts \$0.50
<b>Test 13 -</b> process_transfer_valid	Check if transfer is greater than 0	Transaction succeeds
<b>Test 14 -</b> process_transfer_negative	Check if transfer of $\leq 0$ is rejected	"Transfer amount must be positive."
<b>Test 15 -</b> process_transfer_sufficient_balance	Check if transfer succeeds when balance is sufficient	Transaction succeeds
<b>Test 16 -</b> process_transfer_insufficient_funds	Check if transfer fails when balance is insufficient	"Insufficient funds for transfer."
<b>Test 17 -</b> process_transfer_destination_exists	Check if transfer fails when destination account does not exist	"Destination account not found."
<b>Test 18 -</b> process_transfer_fee_applied	Check if transfer fee is deducted	Deducts \$1.00

Test Name	What is being tested	Expected Output
<b>Test 19 -</b> validate_transaction_valid	Check if a valid transaction passes	Valid
<b>Test 20 -</b> validate_transaction_negative_amount	Check if a negative amount is rejected	"Transaction amount must be positive."
<b>Test 21 -</b> validate_transaction_inactive_account	Check if an inactive account is rejected	"Account is not active."
<b>Test 22 -</b> validate_transaction_invalid_type	Check if an invalid transaction type is rejected	"Invalid transaction type"
<b>Test 23 -</b> execute_transaction_deposit_success	Check if deposit is processed correctly	Transaction succeeds
<b>Test 24 -</b> execute_transaction_withdraw_success	Check if withdrawal is processed correctly when balance is sufficient	Transaction succeeds
<b>Test 25 -</b> execute_transaction_withdraw_insufficient_funds	Check if withdrawal fails when balance is insufficient	"Insufficient funds for withdrawal."
<b>Test 26 -</b> execute_transaction_transfer_success	Check if transfer is processed correctly when both accounts exist and funds are sufficient	Transaction succeeds

<b>Test 27 -</b> execute_transaction_transfer_insufficient_funds	Check if transfer fails when balance is insufficient	"Insufficient funds for transfer."
<b>Test 28 -</b> execute_transaction_transfer_no_destination_account	Check if transfer fails when the destination account is missing	"Destination account not found."
<b>Test 29 -</b> execute_transaction_account_not_found	Check if transaction fails when the account is missing	"Account not found."

File 3

Test Name	What is being tested	Expected Output
<b>Test 30 -</b> load_accounts_valid_file	Check if accounts are correctly loaded from a valid file	Returns list of accounts
<b>Test 31 -</b> load_accounts_invalid_file	Check if error is logged for missing file	"File Error: Transaction file not found."

File 4

Test Name	What is being tested	Expected Output
<b>Test 32 -</b> run_backend_valid_flow	Check if backend processes transactions and saves output correctly	Successfully processes all transactions

<b>Test 33 -</b> run_backend_invalid_transaction_f ormat	Check if backend handles incorrect transaction format	"Input Error: Invalid transaction format"
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<b>Test 34 -</b> run_backend_missing_transaction _file	Check if backend handles missing transaction file	"File Error: Transaction file not found."
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