**login:**

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| Requirement | Test  No. | Test  Name | Purpose | Input | Input  Files | Expected Output | Expected Output  Files |
| no other transactions before login | R1T1 | idle logout | User cannot logout before logging in | "logout", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: ", "Cannot logout before login.", "Please enter a transaction: " | none |
| R1T2 | idle createacct | User cannot create account before logging in | "createacc", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: ", "Cannot create account while logged out.", "Please enter a transaction: " | none |
| R1T3 | idle deleteacct | User cannot delete account before logging in | "deleteacc", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: ", "Cannot delete account while logged out.", "Please enter a transaction: " | none |
| R1T4 | idle deposit | User cannot deposit before logging in | "deposit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: ", "Cannot deposit while logged out.", "Please enter a transaction: " | none |
| R1T5 | idle withdraw | User cannot withdraw before logging in | "withdraw", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: ", "Cannot withdraw while logged out.", "Please enter a transaction: " | none |
| R1T6 | idle transfer | User cannot transfer before logging in | "transfer", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: ", "Cannot transfer while logged out.", "Please enter a transaction: " | none |
| R1T7 | idle unknown | Deal with an unknown input | "dog", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: ", "Unrecognized transaction: dog", "Please enter a transaction: " | none |
| Login as session type ATM | R2T1 | login ATM | Allows User to log in as Agent | "login", "agent", "--quit" | valid\_accounts\_list.txt.txt | "Please enter a transaction: ", "Please enter login mode: ", "Please enter a transaction: " | none |
| Login as session type Agent | R3T1 | Login Agent | Allows User to log in as Machine | "login", "machine", "--quit" | valid\_accounts\_list.txt.txt | "Please enter a transaction: ", "Please enter login mode: ", "Please enter a transaction: " | none |
| User cannot login once they are already logged in | R4T1 | ATM session login | Do not allow the user to login once they have already logged in | "login", "machine", "login", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: ", "Please enter login mode: ", "Please enter a transaction: ", "Already logged in.", "Please enter a transaction: " | none |
| R4T2 | Agent session login | Do not allows the user to login once they have already logged in | "login", "agent", "login", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: ", "Please enter login mode: ", "Please enter a transaction: ", "Already logged in.", "Please enter a transaction: " | none |

**logout:**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement | Test  No. | Test  Name | Purpose | Input | Input  Files | Expected Output | Expected Output  Files |
| End Processing Day | R5T1 | ATM session logout | Allow the user to logout if they are in an active session | "login", "machine", "logout", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: ", "Please enter login mode: ", "Please enter a transaction: ", "Session completed, output printed to file.", "Please enter a transaction: " | genericLogout.txt |
| R5T2 | Agent session logout | Allow the user to logout if they are in an active session | "login", "agent", "logout", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Session completed, output printed to file.", "Please enter a transaction: " | genericLogout.txt |
| no other transactions other than login after logging out  (It is important to note that logging out as an agent or atm will bring you to the same idle state so we will only test with ATM) | R6T1 | logged out logout | User cannot logout after logging out | "login", "machine", "logout", "logout", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Session completed, output printed to file.", "Please enter a transaction: "  , "Cannot logout before login.", "Please enter a transaction: " | genericLogout.txt |
| R6T2 | logged out createacct | User cannot create account after logging out | "login", "machine", "logout", "createacc", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Session completed, output printed to file.", "Please enter a transaction: "  , "Cannot create account while logged out.", "Please enter a transaction: " | genericLogout.txt |
| R6T3 | logged out deleteacct | User cannot delete account after logging out | "login", "machine", "logout", "deleteacc", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Session completed, output printed to file.", "Please enter a transaction: "  , "Cannot delete account while logged out.", "Please enter a transaction: " | genericLogout.txt |
| R6T4 | logged out deposit | User cannot deposit after logging out | "login", "machine", "logout", "deposit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Session completed, output printed to file.", "Please enter a transaction: "  , "Cannot deposit while logged out.", "Please enter a transaction: " | genericLogout.txt |
| R6T5 | logged out withdraw | User cannot withdraw after logging out | "login", "machine", "logout", "withdraw", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Session completed, output printed to file.", "Please enter a transaction: "  , "Cannot withdraw while logged out.", "Please enter a transaction: " | genericLogout.txt |
| R6T6 | logged out transfer | User cannot transfer after logging out | "login", "machine", "logout", "transfer", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Session completed, output printed to file.", "Please enter a transaction: "  , "Cannot transfer while logged out.", "Please enter a transaction: " | genericLogout.txt |
| R6T7 | logged out unknown | Deal with an unknown input | "login", "machine", "logout", "dog", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Session completed, output printed to file.", "Please enter a transaction: "  , "Unrecognized transaction: dog", "Please enter a transaction: " | genericLogout.txt |
|  | R6T8 | logged out login | User can login after logging out | "login", "machine", "logout", "login", "machine", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Session completed, output printed to file.", "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: " | empty.txt |

**createacct:**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement | Test  No. | Test  Name | Purpose | Input | Input  Files | Expected Output | Expected Output  Files |
| Creating a new account is a privileged transaction | R7T1 | session ATM createacct | Cannot create an account if in ATM mode | "login", "machine", "createacc", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Cannot create account while in ATM mode.", "Please enter a transaction: " | none |
| R7T2 | session agent createacct | Allow the user to create a new account | "login", "agent", "createacc", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Create account selected...", "Please enter account number:"  , "Please enter a transaction: " | none |
| New accounts must have a valid account number | R8T1 | createacct valid number | Ensure that the account number is valid and not already taken | "login", "agent", "createacc", "9876543", "--exit", "--quit" | valid\_accounts\_list.txt.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Create account selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account name:"  , "Please enter a transaction: " | none |
| R8T2 | createacct valid taken number | Ensure there is not duplicate account numbers | "login", "agent", "createacc", "1111111", "--exit", "--quit" | valid\_accounts\_list.txt.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Create account selected...", "Please enter account number:"  , "Error: Account number must not already exist.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R8T3 | createacct account number with less than 7 digits | Ensure the account number is exactly 7 digits | "login", "agent", "createacc", "123456", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Create account selected...", "Please enter account number:"  , "Error: Account numbers must contain 7 digits.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R8T4 | createacct account number with more than 7 digits | Ensure the account number has exactly 7 digits | "login", "agent", "createacc", "12345678", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Create account selected...", "Please enter account number:"  , "Error: Account numbers must contain 7 digits.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R8T5 | createacct account number starts with a 0 | Ensure that the account number does not start with a 0 | "login", "agent", "createacc", "0123456", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Create account selected...", "Please enter account number:"  , "Error: Account numbers cannot begin with a 0.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R8T6 | createacct account number is not a number | Ensure that the account number is actually a number | "login", "agent", "createacc", "dog", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Create account selected...", "Please enter account number:"  , "Error: Entered account number is in fact, not a number.", "Please enter account number:"  , "Please enter a transaction: " | none |
| New accounts must have a valid account name | R9T1 | createacct valid account name | Allow the user to create the account with a name that is valid | "login", "agent", "createacc", "9876543", "Joe Smith", "logout", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Create account selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account name:"  , "Account name confirmed...", "Successfully created account 9876543 belonging to Joe Smith."  , "Please enter a transaction: ", "Session completed, output printed to file.", "Please enter a transaction: " | R9T1\_expected.txt |
| R9T2 | createacct invalid name with more than 30 characters | Ensure the entered account name is not more than 30 characters | "login", "agent", "createacc", "9876543", "This is a long name with more than 30 characters", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Create account selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account name:"  , "Error: Account name must be between 3 and 30 characters (inclusive)."  , "Please enter account name:", "Please enter a transaction: " | none |
| R9T3 | createacct invalid name with less than 3 characters | Ensure the entered account name has at least 3 characters | "login", "agent", "createacc", "9876543", "ah", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Create account selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account name:"  , "Error: Account name must be between 3 and 30 characters (inclusive)."  , "Please enter account name:", "Please enter a transaction: " | none |
| R9T4 | createacct invalid name beginning with space | Ensure the entered account name does not begin with a space | "login", "agent", "createacc", "9876543", " Joe Smith", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Create account selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account name:"  , "Error: Account name cannot begin or end with white space."  , "Please enter account name:", "Please enter a transaction: " | none |
| R9T5 | createacct invalid name ending with a space | Ensure the entered account name does not end with a space | "login", "agent", "createacc", "9876543", "Joe Smith ", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Create account selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account name:"  , "Error: Account name cannot begin or end with white space."  , "Please enter account name:", "Please enter a transaction: " | none |

**deleteacct:**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement | Test  No. | Test  Name | Purpose | Input | Input  Files | Expected Output | Expected Output  Files |
| Deleting an account is a privileged transaction | R10T1 | session ATM deleteacct | Cannot delete an account if in ATM mode | "login", "machine", "deleteacc", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Cannot delete account while in ATM mode.", "Please enter a transaction: " | none |
| R10T2 | session agent deleteacct | Allow the user to delete an account | "login", "agent", "deleteacc", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Delete account selected...", "Please enter account number:"  , "Please enter a transaction: " | none |
| Deleting an account must be done with a valid account number | R11T1 | deleteacct valid account number | Allow the user to proceed to entering the account name | "login", "agent", "deleteacc", "1111111", "--exit", "--quit" | valid\_accounts\_list.txt.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Delete account selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account name:"  , "Please enter a transaction: " | none |
| R11T2 | deleteacct valid account number that does not exist | Ensure we are deleting an account that is currently active | "login", "agent", "deleteacc", "9876543", "--exit", "--quit" | valid\_accounts\_list.txt.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Delete account selected...", "Please enter account number:"  , "Error: Entered account number does not exist.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R11T3 | deleteacct invalid account number with less than 7 digits | Ensure account number cannot be less than 7 digits | "login", "agent", "deleteacc", "123456", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Delete account selected...", "Please enter account number:"  , "Error: Account numbers must contain 7 digits.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R11T4 | deleteacct invalid account number with more than 7 digits | Ensure account number cannot contain more than 7 digits | "login", "agent", "deleteacc", "12345678", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Delete account selected...", "Please enter account number:"  , "Error: Account numbers must contain 7 digits.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R11T5 | deleteacct invalid account number starting with 0 | Ensure account number does not start with 0 | "login", "agent", "deleteacc", "0123456", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Delete account selected...", "Please enter account number:"  , "Error: Account numbers cannot begin with a 0.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R11T6 | deleteacct NaN account number | Ensure that the account number is actually a number | "login", "agent", "deleteacc", "dog", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Delete account selected...", "Please enter account number:"  , "Error: Entered account number is in fact, not a number.", "Please enter account number:"  , "Please enter a transaction: " | none |
| Deleting an account must be done with a valid account name | R12T1 | deleteacct valid name with existing account | Allow the account to be deleted given all info was entered correctly | "login", "agent", "deleteacc", "1111111", "Joe Smith", "logout", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Delete account selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account name:"  , "Account name confirmed...", "Successfully deleted account 1111111 belonging to Joe Smith."  , "Please enter a transaction: ", "Session completed, output printed to file.", "Please enter a transaction: " | R12T1\_expected.txt |
| R12T2 | deleteacct invalid name with more than 30 characters | Ensure the name does not contain more than 30 characters | "login", "agent", "deleteacc", "1111111", "This is a long name with more than 30 characters", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Delete account selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account name:"  , "Error: Account name must be between 3 and 30 characters (inclusive)."  , "Please enter account name:", "Please enter a transaction: " | none |
| R12T3 | deleteacct invalid name with less than 3 characters | Ensure the names contains more than 3 characters | "login", "agent", "deleteacc", "1111111", "ah", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Delete account selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account name:"  , "Error: Account name must be between 3 and 30 characters (inclusive)."  , "Please enter account name:", "Please enter a transaction: " | none |
| R12T4 | deleteacct invalid name beginning with a space | Ensure the entered name does not begin with a space | "login", "agent", "deleteacc", "1111111", " Joe Smith", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Delete account selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account name:"  , "Error: Account name cannot begin or end with white space."  , "Please enter account name:", "Please enter a transaction: " | none |
| R12T5 | deleteacct invalid name ending with a space | Ensure the entered name does not end with a space | "login", "agent", "deleteacc", "1111111", "Joe Smith ", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Delete account selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account name:"  , "Error: Account name cannot begin or end with white space."  , "Please enter account name:", "Please enter a transaction: " | none |

**deposit:**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement | Test  No. | Test  Name | Purpose | Input | Input  Files | Expected Output | Expected Output  Files |
| All Users can deposit to an account | R13T1 | session deposit | Any user should be able to use the deposit command | "login", "machine", "deposit", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:"  , "Please enter a transaction: " | none |
| R13T2 | session deposit | Any user should be able to use the deposit command | "login", "agent", "deposit", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:"  , "Please enter a transaction: " | none |
| Depositing to an account requires a valid account number  (It is important to note that at this time it does not matter if the session is in ATM or agent mode, so we will simply test with ATM mode) | R14T1 | deposit valid account number | Verify that the account number is actually valid and exists | "login", "agent", "deposit", "1111111", "--exit", "--quit" | valid\_accounts\_list.txt.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Please enter a transaction: " | none |
| R14T2 | deposit invalid account number less than 7 digits | Ensure the account number is exactly 7 digits | "login", "agent", "deposit", "9876543", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:"  , "Error: Entered account number does not exist.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R14T3 | deposit invalid account number more than 7 digits | Ensure the account number is exactly 7 digits | "login", "agent", "deposit", "123456", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:"  , "Error: Account numbers must contain 7 digits.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R14T4 | deposit invalid account number starting with a 0 | Ensure the account number does not start with a 0 | "login", "agent", "deposit", "12345678", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:"  , "Error: Account numbers must contain 7 digits.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R14T5 | deposit invalid account number not a number | Ensure the account number is actually a number | "login", "agent", "deposit", "0123456", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:"  , "Error: Account numbers cannot begin with a 0.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R14T6 | deposit non-existent account | Ensure that the user cannot deposit into a non-existent account | "login", "agent", "deposit", "dog", "--exit", "--quit" | valid\_accounts\_list.txt.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:"  , "Error: Entered account number is in fact, not a number.", "Please enter account number:"  , "Please enter a transaction: " | none |
| Depositing to an ATM requires a valid monetary value in the range 0 < M <= 200,000 | R15T1 | depositing ATM valid amount | Ensure that the amount number is actually valid and within deposit constraints for ATM | "login", "machine", "deposit", "1111111", "2000", "logout", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Amount confirmed..." , "Successfully deposited 2000 cents into account 1111111."  ,"Please enter a transaction: ", "Session completed, output printed to file.", "Please enter a transaction: " | R15T1\_transaction\_summary\_file.txt |
| R15T2 | depositing ATM invalid greater than 200,000 | Ensure the user cannot deposit more then $2000 while at an ATM | "login", "machine", "deposit", "1111111", "300000", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Error: Entered amount cannot exceed the maximum allowable amount."  , "Please enter amount:", "Please enter a transaction: " | none |
| R15T3 | depositing ATM invalid less then 0 | User cannot enter an amount less then 0 | "login", "machine", "deposit", "1111111", "-1", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Error: Entered amount cannot be less than nothing."  , "Please enter amount:", "Please enter a transaction: " | none |
| R15T4 | depositing ATM invalid amount | Ensure that the user cannot deposit an invalid amount | "login", "machine", "deposit", "1111111", "dog", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Error: Entered amount must be an integer."  , "Please enter amount:", "Please enter a transaction: " | none |
|  | R15T5 | depositing daily limit | Ensure that the daily limit is not exceeded | "login", "machine", "deposit", "1111111", "200000", "deposit", "1111111", "200000", "deposit", "1111111", "200000", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Amount confirmed..." , "Successfully deposited 200000 cents into account 1111111.", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Amount confirmed..." , "Successfully deposited 200000 cents into account 1111111.", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:" | R15T5\_expected.txt |
| Depositing as an agent requires a valid monetary value in the range 0 < M < 99,999,999 | R16T1 | depositing Agent valid amount | Ensure that the user is entering a valid amount | "login", "agent", "deposit", "1111111", "1000000", "logout", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Amount confirmed..." , "Successfully deposited 1000000 cents into account 1111111."  ,"Please enter a transaction: ", "Session completed, output printed to file.", "Please enter a transaction: " | R16T1\_expected.txt |
| R16T2 | depositing agent invalid amount greater than 99,999,999 | User cannot enter a value greater than 99,999,999 | "login", "agent", "deposit", "1111111", "100000000", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Error: Entered amount cannot exceed the maximum allowable amount."  , "Please enter amount:", "Please enter a transaction: " | none |
| R16T3 | depositing agent invalid amount less than 0 | User cannot enter a value less than 0 | "login", "agent", "deposit", "1111111", "-1", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Error: Entered amount cannot be less than nothing."  , "Please enter amount:", "Please enter a transaction: " | None |
| R16T4 | depositing agent invalid number | User cannot deposit an invalid amount | "login", "agent", "deposit", "1111111", "dog", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Deposit selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Error: Entered amount must be an integer."  , "Please enter amount:", "Please enter a transaction: " | none |

**withdraw:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement | Test  No. | Test  Name | Purpose | Input | Input  Files | Expected Output | Expected Output  Files |
| All users may withdraw | R17T1 | session ATM withdraw | Any user should be able to withdraw | "login", "machine", "withdraw", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Withdraw selected...", "Please enter account number:"  , "Please enter a transaction: " | none |
| R17T2 | session agent withdraw | Any user should be able to withdraw | "login", "agent", "withdraw", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Withdraw selected...", "Please enter account number:"  , "Please enter a transaction: " | none |
| Withdrawing from an account requires a valid account number  (It is important to note that at this time it does not matter if the session is in ATM or agent mode, so we will simply test with ATM mode) | R18T1 | withdraw valid account number | Verify that the account number is actually valid and exists | "login", "agent", "withdraw", "1111111", "--exit", "--quit" | valid\_accounts\_list.txt.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Withdraw selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Please enter a transaction: " | none |
| R18T2 | withdraw non-existent account | Ensure that the user cannot withdraw from a non-existent account | "login", "agent", "withdraw", "9876543", "--exit", "--quit" | valid\_accounts\_list.txt.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Withdraw selected...", "Please enter account number:"  , "Error: Entered account number does not exist.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R18T3 | withdraw invalid account number less than 7 digits | Ensure the account number is exactly 7 digits | "login", "agent", "withdraw", "123456", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Withdraw selected...", "Please enter account number:"  , "Error: Account numbers must contain 7 digits.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R18T4 | withdraw invalid account number more than 7 digits | Ensure the account number is exactly 7 digits | "login", "agent", "withdraw", "12345678", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Withdraw selected...", "Please enter account number:"  , "Error: Account numbers must contain 7 digits.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R18T5 | withdraw invalid account number starting with a 0 | Ensure the account number does not start with a 0 | "login", "agent", "withdraw", "0123456", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Withdraw selected...", "Please enter account number:"  , "Error: Account numbers cannot begin with a 0.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R18T6 | withdraw invalid account number not a number | Ensure the account number is actually a number | "login", "agent", "withdraw", "dog", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Withdraw selected...", "Please enter account number:"  , "Error: Entered account number is in fact, not a number.", "Please enter account number:"  , "Please enter a transaction: " | none |
| Withdrawing from an ATM requires a valid monetary value in the range 0 < M <= 100,000 and cannot exceed 500,000 in a single session | R19T1 | withdrawing ATM valid amount | Ensure that the amount number is actually valid and within deposit constraints for ATM | "login", "machine", "withdraw", "1111111", "2000", "logout", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Withdraw selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Amount confirmed..." , "Successfully withdrew 2000 cents from account 1111111."  ,"Please enter a transaction: ", "Session completed, output printed to file.", "Please enter a transaction: " | R19T1\_expected.txt |
| R19T2 | withdrawing ATM invalid greater than 100,000 | Ensure the user cannot withdraw more then $1000 while at an ATM | "login", "machine", "withdraw", "1111111", "300000", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Withdraw selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Error: Entered amount cannot exceed the maximum allowable amount."  , "Please enter amount:", "Please enter a transaction: " | none |
| R19T3 | withdrawing ATM invalid less then 0 | User cannot enter an amount less then 0 | login  ATM  "login", "machine", "withdraw", "1111111", "-1", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Withdraw selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Error: Entered amount cannot be less than nothing."  , "Please enter amount:", "Please enter a transaction: " | none |
| R19T4 | withdrawing ATM invalid amount | Ensure that the user cannot withdraw an invalid amount | "login", "machine", "withdraw", "1111111", "dog", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Withdraw selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Error: Entered amount must be an integer."  , "Please enter amount:", "Please enter a transaction: " | none |
| R19T5 | withdrawing ATM more than $5000 in single day | Ensure the user cannot withdraw more than $5000 in a single day | "login", "machine", "withdraw", "1111111", "100000", "withdraw", "1111111", "100000", "withdraw", "1111111", "100000", "withdraw", "1111111", "100000", "withdraw", "1111111", "100000", "withdraw", "1111111", "100000", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: ", "Please enter login mode: ", "Please enter a transaction: ", "Withdraw selected...", "Please enter account number:", "Account number confirmed...", "Please enter amount:", "Amount confirmed...", "Successfully withdrew 100000 cents from account 1111111.", "Please enter a transaction: ", "Withdraw selected...", "Please enter account number:", "Account number confirmed...", "Please enter amount:", "Amount confirmed...", "Successfully withdrew 100000 cents from account 1111111.", "Please enter a transaction: ", "Withdraw selected...", "Please enter account number:", "Account number confirmed...", "Please enter amount:", "Amount confirmed...", "Successfully withdrew 100000 cents from account 1111111.", "Please enter a transaction: ", "Withdraw selected...", "Please enter account number:", "Account number confirmed...", "Please enter amount:", "Amount confirmed...", "Successfully withdrew 100000 cents from account 1111111.", "Please enter a transaction: ", "Withdraw selected...", "Please enter account number:", "Account number confirmed...", "Please enter amount:", "Amount confirmed...", "Successfully withdrew 100000 cents from account 1111111.", "Please enter a transaction: ", "Withdraw selected...", "Please enter account number:", "Account number confirmed...", "Please enter amount:", "Error: Entered amount cannot exceed the maximum allowable session amount for this type of transaction.", "Please enter amount:", "Please enter a transaction: " | R19T5\_expected.txt |
| Withdrawing as an agent requires a valid monetary value in the range 0 < M < 99,999,999 | R20T1 | withdrawing Agent valid amount | Ensure that the user is entering a valid amount | "login", "agent", "withdraw", "1111111", "500000", "logout", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Withdraw selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Amount confirmed..." , "Successfully withdrew 500000 cents from account 1111111."  ,"Please enter a transaction: ", "Session completed, output printed to file.", "Please enter a transaction: " | R20T1\_expected.txt |
| R20T2 | withdrawing agent invalid amount greater than 99,999,999 | User cannot enter a value greater than 99,999,999 | "login", "agent", "withdraw", "1111111", "-1", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Withdraw selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Error: Entered amount cannot be less than nothing."  , "Please enter amount:", "Please enter a transaction: " | none |
| R20T3 | withdrawing agent invalid amount less than 0 | User cannot enter a value less than 0 | "login", "agent", "withdraw", "1111111", "100000000", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Withdraw selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Error: Entered amount cannot exceed the maximum allowable amount."  , "Please enter amount:", "Please enter a transaction: " | none |
| R20T4 | withdrawing agent invalid number | User cannot deposit an invalid amount | "login", "agent", "withdraw", "1111111", "dog", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Withdraw selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Error: Entered amount must be an integer."  , "Please enter amount:", "Please enter a transaction: " | none |

**transfer:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement | Test  No. | Test  Name | Purpose | Input | Input  Files | Expected Output | Expected Output  Files |
| All users may transfer | R21T1 | session transfer | Any user should be allowed to transfer | "login", "machine", "transfer", "--exit", "--quit" | Valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Please enter a transaction: " | None |
| R21T2 | session transfer | Any user should be allowed to transfer | "login", "agent", "transfer", "--exit", "--quit" | Valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Please enter a transaction: " | None |
| Transfer requires a valid account number to transfer **to**  (It is important to note that at this time it does not matter if the session is in ATM or agent mode, so we will simply test with ATM mode) | R22T1 | transfer to valid account number | Verify that the account number is actually valid and exists | "login", "agent", "transfer", "1111111", "--exit", "--quit" | valid\_accounts\_list.txt.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account number:"  , "Please enter a transaction: " | none |
| R22T2 | transfer to non-existent account | Ensure that the user cannot transfer to a non-existent account | "login", "agent", "transfer", "9876543", "--exit", "--quit" | valid\_accounts\_list.txt.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Error: Entered account number does not exist.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R22T3 | transfer to invalid account number less than 7 digits | Ensure the account number is exactly 7 digits | "login", "agent", "transfer", "123456", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Error: Account numbers must contain 7 digits.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R22T4 | transfer to invalid account number more than 7 digits | Ensure the account number is exactly 7 digits | "login", "agent", "transfer", "12345678", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Error: Account numbers must contain 7 digits.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R22T5 | transfer to invalid account number starting with a 0 | Ensure the account number does not start with a 0 | "login", "agent", "transfer", "0123456", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Error: Account numbers cannot begin with a 0.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R22T6 | transfer to invalid account number not a number | Ensure the account number is actually a number | "login", "agent", "transfer", "dog", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Error: Entered account number is in fact, not a number.", "Please enter account number:"  , "Please enter a transaction: " | none |
| Transfer requires a valid account number to transfer **from**  (It is important to note that at this time it does not matter if the session is in ATM or agent mode, so we will simply test with ATM mode) | R23T1 | transfer from valid account number | Verify that the account number is actually valid and exists | "login", "agent", "transfer", "1111111", "2222222", "--exit", "--quit" | valid\_accounts\_list.txt.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Please enter a transaction: " | none |
| R23T2 | transfer from non-existent account | Ensure that the user cannot transfer from a non-existent account | "login", "agent", "transfer", "1111111", "9876543", "--exit", "--quit" | valid\_accounts\_list.txt.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account number:"  , "Error: Entered account number does not exist.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R23T3 | transfer from invalid account number less than 7 digits | Ensure the account number is exactly 7 digits | "login", "agent", "transfer", "1111111", "123456", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account number:"  , "Error: Account numbers must contain 7 digits.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R23T4 | transfer from invalid account number more than 7 digits | Ensure the account number is exactly 7 digits | "login", "agent", "transfer", "1111111", "12345678", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account number:"  , "Error: Account numbers must contain 7 digits.", "Please enter account number:"  , "Please enter a transaction: ": | none |
| R23T5 | transfer from invalid account number starting with a 0 | Ensure the account number does not start with a 0 | "login", "agent", "transfer", "1111111", "0123456", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account number:"  , "Error: Account numbers cannot begin with a 0.", "Please enter account number:"  , "Please enter a transaction: " | none |
| R23T6 | transfer from invalid account number not a number | Ensure the account number is actually a number | "login", "agent", "transfer", "1111111", "dog", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account number:"  , "Error: Entered account number is in fact, not a number.", "Please enter account number:"  , "Please enter a transaction: " | none |
|  | R23T7 | Transferring valid destination account | Ensure that the receiving account number is not the same as the sending account number | "login", "agent", "transfer", "1111111", "1111111", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account number:"  , "Error: From account cannot be the same as to account.", "Please enter account number:"  , "Please enter a transaction: " | none |
| Transferring from an ATM requires a valid monetary value in the range 0 < M <= 1,000,000 and cannot exceed 1,000,000 in a single session | R24T1 | Transferring valid amount in ATM mode | Ensure that the amount number is actually valid and within transfer constraints for ATM | "login", "machine", "transfer", "1111111", "2222222", "750000", "logout", "--quit"1111111  100  logout | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Amount confirmed..." , "Successfully transferred 750000 cents from account 2222222 to 1111111."  ,"Please enter a transaction: ", "Session completed, output printed to file.", "Please enter a transaction: " | R24T1\_expected.txt |
| R24T2 | Transferring amount greater than 1,000,000 in ATM mode | Ensure the user cannot transfer more then $10,000 while at an ATM | "login", "machine", "transfer", "1111111", "2222222", "2000000", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Error: Entered amount cannot exceed the maximum allowable amount."  , "Please enter amount:", "Please enter a transaction: " | none |
| R24T3 | Transferring amount less than 0 in ATM mode | User cannot enter a transfer amount less then 0 | "login", "machine", "transfer", "1111111", "2222222", "-1", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Error: Entered amount cannot be less than nothing."  , "Please enter amount:", "Please enter a transaction: " | none |
| R24T4 | Transferring invalid amount in ATM mode | Ensure that the user cannot transfer an invalid amount | "login", "machine", "transfer", "1111111", "2222222", "dog", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Error: Entered amount must be an integer."  , "Please enter amount:", "Please enter a transaction: " | none |
| R24T5 | Transferring amount greater than $10,000 in a single day | Ensure user cannot transfer more than $10,000 in a single day | "login", "machine", "transfer", "1111111", "2222222", "750000"  , "transfer", "1111111", "2222222", "750000", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Amount confirmed..." , "Successfully transferred 750000 cents from account 2222222 to 1111111."  , "Please enter a transaction: " , "Transfer selected..."  , "Please enter account number:", "Account number confirmed..."  , "Please enter account number:", "Account number confirmed..."  , "Please enter amount:", "Error: Entered amount cannot exceed the maximum allowable session amount for this type of transaction."  , "Please enter amount:", "Please enter a transaction: " | R24T5\_expected.txt |
| Transferring in Agent mode requires a valid monetary value in the range 0 < M <= 99,999,999 | R25T1 | Transferring valid amount in Agent mode | Ensure that the amount number is actually valid and within transfer constraints for Agent | "login", "agent", "transfer", "1111111", "2222222", "7500000", "logout", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Amount confirmed..." , "Successfully transferred 7500000 cents from account 2222222 to 1111111."  ,"Please enter a transaction: ", "Session completed, output printed to file.", "Please enter a transaction: " | R25T1\_expected.txt |
| R25T2 | Transferring amount greater than 99,999,999 in Agent mode | Ensure the user cannot transfer more then $99,999.99 while in Agent mode | "login", "machine", "transfer", "1111111", "2222222", "100000000", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Error: Entered amount cannot exceed the maximum allowable amount."  , "Please enter amount:", "Please enter a transaction: " | none |
| R25T3 | Transferring amount less than 0 in Agent mode | User cannot enter a transfer amount less then 0 | "login", "machine", "transfer", "1111111", "2222222", "-1", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Error: Entered amount cannot be less than nothing."  , "Please enter amount:", "Please enter a transaction: " | none |
| R25T4 | Transferring invalid amount in Agent mode | Ensure that the user cannot transfer an invalid amount | "login", "machine", "transfer", "1111111", "2222222", "dog", "--exit", "--quit" | valid\_accounts\_list.txt | "Please enter a transaction: "  , "Please enter login mode: ", "Please enter a transaction: "  , "Transfer selected...", "Please enter account number:"  , "Account number confirmed...", "Please enter account number:"  , "Account number confirmed...", "Please enter amount:"  , "Error: Entered amount must be an integer."  , "Please enter amount:", "Please enter a transaction: " | none |

**Account List File Validation:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement | Test  No. | Test  Name | Purpose | Input | Input  Files | Expected Output | Expected Output  Files |
| Input files must consist of text lines containing only an account number. Each line must be exactly 7 characters, have seven decimal digits, not begin with ‘0’, and the file must end with ‘0000000’ | R26T1 | Account file 7 chars | Each line in the account file must be exactly 7 chars |  | InvalidAccountFile1.txt | "Invalid Account File Recieved" | None |
| R26T2 | Account file decimal digits | Each line in the account file must contain only decimal digits |  | InvalidAccountFile2.txt | "Invalid Account File Recieved" | None |
| R26T3 | Account file delimit char | Each line in the account file must be delimited by ‘\n’ |  | InvalidAccountFile3.txt | "Invalid Account File Recieved" | None |
| R26T4 | Account file begins with nonzero decimal | Each line in the account file must begin with a nonzero decimal char |  | InvalidAccountFile4.txt | "Invalid Account File Recieved" | None |
| R26T5 | Account file ending line | Account file must end with the line ‘0000000’ |  | InvalidAccountFile5.txt | "Invalid Account File Recieved" | None |