Test Case Number	Purpose	Input	Input files	Output files (transaction summary file)	Terminal output
1	Check that login starts a front end session when given proper input and logout ends a front end session when given proper input(atm)	login atm logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 ***	Logged in as atm Logging out
2	Check that login starts a front end session when given proper input and logout ends a front end session when given proper input (agent)	login agent logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as agent Logging out
3	Checks that the create account transaction creates a new account when given proper input (agent)	login agent create 98765432 calvin logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	CR 98765432 00000000 000 calvin ES 00000000 00000000 000 ***	Logged in as agent Creating account 98765432 Logging out
4	Checks that the delete account transaction deletes an existing account when given proper input (agent).  If this is successful, also accounts for front-end being able to do privelaged transactions when logged in as agent	login agent delete 12345678 calvin logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	DL 12345678 00000000 000 calvin ES 00000000 00000000 000 ***	Logged in as agent Deleting account 12345678 Logging out
5	Checks that the deposit transaction deposits into an existing account when given proper input (atm)	login atm deposit 12345678 100 logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	DE 12345678 00000000 100 *** ES 00000000 00000000 000 ***	Logged in as atm Depositing 100 cents into 12345678 Logging out
6	Checks that the deposit transaction deposits into an existing account when given proper input (agent)	login agent deposit 12345678 100 logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	DE 12345678 00000000 100 *** ES 00000000 00000000 000 ***	Logged in as agent Depositing 100 cents into 12345678 Logging out
7	Checks that the withdraw transaction withdraws from an existing account when given proper input (atm)	login atm withdraw 12345678 100 logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	WD 12345678 00000000 100 *** ES 00000000 00000000 000 ***	Logged in as atm Withdrawing 100 cents from 12345678 Logging out
8	Checks that the withdraw transaction withdraws from an existing account when given proper input (agent)	login agent withdraw 12345678 100 logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	WD 12345678 00000000 100 *** ES 00000000 00000000 000 ***	Logged in as agent Withdrawing 100 cents from 12345678 Logging out
9	Checks that the transfer transaction transfers from an existing account to another existing account when given proper input (atm)	login atm transfer 12345678 23456789 100 logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	TR 12345678 23456789 100 *** ES 00000000 00000000 000 ***	Logged in as atm Transferring 100 cents from 12345678 to 23456789 Logging out
10	Checks that the transfer transaction transfers from an existing account to another existing account when given proper input (agent)	login agent transfer 12345678 23456789 100 logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	TR 12345678 23456789 100 *** ES 00000000 00000000 000 ***	Logged in as agent Transferring 100 cents from 12345678 to 23456789 Logging out

11	Checks that no transaction other than login should be accepted before login (atm/agent) If this is successful, also accounts for logout writing out transaction summary file and stops accepting any transactions exept login Also checks that logout is only accepted when logged in	logout create delete withdraw deposit transfer	Not Required	Empty	Error: not logged in
12	No subsequent login until logged out (atm)	login atm login logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as atm Error: already logged in Logging out
13	No subsequent login until logged out (agent)	login agent login logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as agent Error: already logged in Logging out
14	Won't login with invalid type	login pie	Not Required	Empty	Error: Failed to log in as pie
15	After atm login only unprivelaged transactions are accepted	login atm create delete logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as atm Error: lacks privelage Error: lacks privelage Logging out
16	Checks that no transaction on new account is accepted in the same session it was created	login agent create 98765432 calvin create 98765432 delete 98765432 delete 98765432 withdraw 98765432 deposit 98765432 transfer 98765432 transfer 12345678 98765432 logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	CR 98765432 00000000 000 calvin ES 00000000 00000000 000 ***	Logged in as agent Creating account 98765432 Error: can't perform transactions to account Logging out
17	Checks that create only allows 8 digit numbers that don't start with 0	login agent create 1	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as agent Error: account number must be 8 digits and not start with 0 Error: account number must be 8 digits and not start with 0 Error: account number must be 8 digits and not start with 0 Error: account number must be 8 digits and not start with 0 Logging out
18	Checks that create doesn't allow duplicate numbers	login agent create 12345678 logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as agent Error: account number already exists Logging out

19	Checks that new account name must be between 3-30 alphanumeric characters, and doesn't start or end with white spaces	login agent create 98765432 ab create 98765432 thisnameismorethanthirtycharacters create 97865432 hasspace create 97865432 hasspace dreate 97865432 hasspaceatend logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as agent Error: account name must be between 3 and 30 alphanumeric characters Error: account name must be between 3 and 30 alphanumeric characters Error: account name must be between 3 and 30 alphanumeric characters Error: account name must be between 3 and 30 alphanumeric characters Error: account name must be between 3 and 30 alphanumeric characters Logging out
20	Checks that new account name can have spaces in between	login agent create 98765432 calvin ly logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	CR 98765432 00000000 000 calvin ly ES 00000000 00000000 000 ***	Logged in as agent Creating account 98765432 Logging out
21	Checks that delete doesn't accept invalid account numbers	login agent delete 98765432 delete 1 delete 123456789 delete pie logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as agent Error: account number isn't valid Error: account number must be 8 digits and not start with 0 Error: account number must be 8 digits and not start with 0 Error: account number must be 8 digits and not start with 0 Logging out
22	Checks that delete doesn't accpet invalid account names	login agent delete 98765432 ab delete 98765432 thisnameismorethanthirtycharacters delete 97865432 hasspace delete 97865432 hasspacedelete 97865432 hasspaceatend logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as agent Error: account name must be between 3 and 30 alphanumeric characters Error: account name must be between 3 and 30 alphanumeric characters Error: account name must be between 3 and 30 alphanumeric characters Error: account name must be between 3 and 30 alphanumeric characters Error: account name must be between 3 and 30 alphanumeric characters Logging out
23	Checks that no transaction on deleted account is accepted in the same session it was deleted	login agent delete 12345678 calvin create 12345678 delete 12345678 withdraw 12345678 deposit 12345678 transfer 12345678 transfer 98765432 12345678 logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	DL 98765432 00000000 000 calvin ES 00000000 00000000 000 ***	Logged in as agent Deleting account 98765432 Error: can't perform transactions to account Logging out

24	Checks that account being deleted name can have spaces in between	login agent delete 98765432 calvin ly logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	DL 98765432 00000000 000 calvin ly ES 00000000 00000000 000 ***	Logged in as agent Deleting account 98765432 Logging out
25	Checks that deposit checks for valid account number (atm)	login atm deposit 1 deposit 123456789 deposit 98765432 deposit pie logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as atm Error: account number must be 8 digits and not start with 0 Error: account number must be 8 digits and not start with 0 Error: account number isn't valid Error: account number must be 8 digits and not start with 0 Logging out
26	Checks that deposit checks for valid account number (agent)	login agent deposit 1 deposit 123456789 deposit 98765432 deposit pie logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as agent Error: account number must be 8 digits and not start with 0 Error: account number must be 8 digits and not start with 0 Error: account number isn't valid Error: account number must be 8 digits and not start with 0 Logging out
27	Checks that deposit checks for valid amount number (atm)	login atm deposit 12345678 -1 deposit 12345678 100001 logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as atm Error: amount deposited must be between 0 and 100000 Error: amount deposited must be between 0 and 100000 Logging out
28	Checks that deposit checks for valid amount number (agent)	login agent deposit 12345678 -1 deposit 12345678 10000000001 logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as agent Error: amount transfered must be between 0 and 99999999 Error: amount transfered must be between 0 and 99999999 Logging out
29	Checks that withdraw checks for valid account number (atm)	login atm withdraw 1 withdraw 123456789 withdraw 98765432 withdraw pie logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as atm Error: account number must be 8 digits and not start with 0 Error: account number must be 8 digits and not start with 0 Error: account number isn't valid Error: account number must be 8 digits and not start with 0 Logging out

30	Checks that withdraw checks for valid account number (agent)	login agent withdraw 1 withdraw 123456789 withdraw 98765432 withdraw pie logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as agent Error: account number must be 8 digits and not start with 0 Error: account number must be 8 digits and not start with 0 Error: account number isn't valid Error: account number must be 8 digits and not start with 0 Logging out
31	Checks that withdraw checks for valid amount number (atm)	login atm withdraw 12345678 -1 withdraw 12345678 100001 logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as atm Error: amount withdrawed must be between 0 and 100000 Error: amount withdrawed must be between 0 and 100000 Logging out
32	Checks that withdraw checks for valid amount number (agent)	login agent withdraw 12345678 -1 withdraw 12345678 100001 logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as agent Error: amount transfered must be between 0 and 99999999 Error: amount transfered must be between 0 and 99999999 Logging out
33	Checks that withdraw doesn't allow more than \$1000.00 to be withdrawn from an account in a single atm session (atm)	login atm withdraw 12345678 50000 withdraw 12345678 60000 withdraw 23456789 60000 logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	WD 12345678 00000000 50000 *** WD 23456789 00000000 60000 *** ES 00000000 00000000 000 ***	Logged in as atm Withdrawing 50000 cents from 12345678 Error: Account withdrawing limit of \$ 1000.00 Withdrawing 60000 cents from 23456789 Logging out
34	Checks that withdraw doesn't allow have a limit in agent sessions (agent)	login agent withdraw 12345678 50000 withdraw 12345678 60000 logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	WD 12345678 00000000 50000 *** WD 12345678 00000000 60000 *** ES 00000000 00000000 000 ***	Logged in as atm Withdrawing 50000 cents from 12345678 Withdrawing 60000 cents from 12345678 Logging out

35	Checks that transfer checks for valid account number (atm)	login atm transfer 1 transfer 12345678 1 transfer 123456789 transfer 12345678 123456789 transfer 98765432 transfer 12345678 98765432 transfer 12345678	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as atm Error: account number must be 8 digits and not start with 0 Error: account number must be 8 digits and not start with 0 Error: account number must be 8 digits and not start with 0 Error: account number must be 8 digits and not start with 0 Error: account number isn't valid Error: account number isn't valid Error: account number must be 8 digits and not start with 0 Error: account number must be 8 digits and not start with 0 Logging out
36	Checks that transfer checks for valid account number (agent)	login agent transfer 1 transfer 12345678 1 transfer 123456789 transfer 12345678 123456789 transfer 98765432 transfer 12345678 98765432 transfer 12345678	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as atm  Error: account number must be 8 digits and not start with 0  Error: account number must be 8 digits and not start with 0  Error: account number must be 8 digits and not start with 0  Error: account number must be 8 digits and not start with 0  Error: account number isn't valid  Error: account number isn't valid  Error: account number must be 8 digits and not start with 0  Error: account number must be 8 digits and not start with 0  Logging out
37	Checks that transfer checks for valid amount number (atm)	login atm transfer 12345678 23456789 -1 transfer 12345678 23456789 100001 logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as atm Error: amount transfered must be between 0 and 100000 Error: amount transfered must be between 0 and 100000 Logging out
38	Checks that transfer checks for valid amount number (agent)	login agent transfer 12345678 23456789 -1 transfer 12345678 23456789 100001 logout	Valid accounts file with 10 valid 8 digit account numbers. Two of which will be the numbers 12345678, 23456789 and will not contain the account number 98765432	ES 00000000 00000000 000 ***	Logged in as agent Error: amount transfered must be between 0 and 99999999 Error: amount transfered must be between 0 and 99999999 Logging out