

Modifications to Template

Modifications made to the template 'CI-Python' by Professor Ding include:

- Modifying the names of the test case input and output files to match the test case files from our group's various directories
- Changing the os.linesep character to "\n" so it would work on Windows (which uses carriage return as well as newline to pass input to io.StringIO)
- Folder structure does not match Ding's suggestions. The changes made include the hierarchy of using T# for individual tests within a given requirement folder, whereas Ding only has the R# as the folder
- Modified the name of the accounts file to be 'accounts.txt' to match our structure

Table of Test Outcomes + Remedies

Transaction Code	Requirement	Test Case	Problem	Remedy	Outcome
login	R1	T1	Missing 'logout' from input	Add 'logout' to input; modify code to end once logged out	PASS
login	R1	T2	Missing 'logout' from input	Add 'logout' to input; modify code to end once logged out	PASS
login	R1	T3	Missing 'logout' from input	Add 'logout' to input; modify code to end once logged out	PASS
login	R1	T4	Missing 'logout' from input	Add 'logout' to input; modify code to end once logged out	PASS
login	R1	T5	Missing 'logout' from input	Add 'logout' to input; modify code to end once logged out	PASS
login	R1	T6	Missing 'logout' from input	Add 'logout' to input; modify code	PASS

				to end once logged out	
login	R2	T1	Unable to logout from mode selection	Modify code to allow user to log out from mode selection	PASS
login	R3	T1	Missing 'logout' from input	Add 'logout' to input; modify code to end once logged out	PASS
login	R3	T2	Could use createacct from machine mode	Modify code to fix bug that allows users to createacct from machine	PASS
login	R3	T2	Could use deleteacct from machine mode	Modify code to fix bug that allows users to deleteacct from machine	PASS
login	R4	T1	Missing transaction summary file	Add transaction summary file (expected) to test case	PASS
login	R5	T1	Unable to logout from mode selection	Modify code to allow user to log out from mode selection	PASS
login	R6	T1	--	--	PASS
login	R6	T2	--	--	PASS
login	R6	T3	--	--	PASS
login	R6	T4	Test case output didn't grammatically match program output	Modify program output to match test case output	PASS
login	R7	T1	--	--	PASS
login	R7	T2	--	--	PASS

login	R7	T3	Program could accept empty accounts file	Modify program to fail upon an empty list file	PASS
logout	R1	T1	--	--	PASS
logout	R2	T1	--	--	PASS
logout	R2	T2	--	--	PASS
logout	R2	T3	--	--	PASS
logout	R2	T4	--	--	PASS
logout	R2	T5	--	--	PASS
logout	R2	T6	--	--	PASS
logout	R3	T1	--	--	PASS
createacct	R1	T1	Test case output didn't grammatically match program output	Modify program output to match test case output	PASS
createacct	R1	T2	--	--	PASS
createacct	R2	T1	Input does not include a valid number following the invalid number	Add a valid number in the input after the invalid number is entered	PASS
createacct	R2	T2	Input does not include a valid number following the invalid number	Add a valid number in the input after the invalid number is entered	PASS
createacct	R2	T3	--	--	PASS
createacct	R3	T1	Input does not include a valid number following the taken number	Add a valid number in the input after the invalid number is entered	PASS
createacct	R3	T2	--	--	PASS
createacct	R4	T1	Input does not include a valid name following the invalid name	Add a valid name in the input after the invalid	PASS

				number is entered	
createacct	R4	T2	Input does not include a valid name following the invalid name	Add a valid name in the input after the invalid number is entered	PASS
createacct	R4	T3	Input does not include a valid name following the invalid name	Add a valid name in the input after the invalid number is entered	PASS
createacct	R4	T4	Input does not include a valid name following the invalid name	Add a valid name in the input after the invalid number is entered	PASS
deleteacct	R1	T1	--	--	PASS
deleteacct	R1	T2	Program accepts an account number to delete that does not exist	Modify code to add each valid account to an O(1) dictionary to allow for quick lookup to see if number exists	PASS
deleteacct	R2	T1	--	--	PASS
deleteacct	R3	T1	--	--	PASS
deleteacct	R4	T1	--	--	PASS
deleteacct	R5	T1	Program accepts deleteacct from machine mode	Modify code to deny deleteacct as a valid transaction code when in machine mode	PASS
deleteacct	R6	T1	Test case includes logout followed by furthers inputs	Remove 'login logout' from input and simply	PASS

			which is illegal after the adjustments to logout (which now ends the program)	maintain the current user	
deposit	R1	T1	Input does not include a valid account number after the invalid one	Add a valid account number following the invalid account number	PASS
deposit	R1	T2	Input does not include a valid account number after the invalid one	Add a valid account number following the invalid account number	PASS
deposit	R1	T3	--	--	PASS
deposit	R1	T4	--	--	PASS
deposit	R2	T1	Input does not include a valid amount (cents) following the amount that exceeds the limit	Add valid amount (cents) following the amount that exceeds the limit	PASS
deposit	R2	T2	Input does not include a valid amount (cents) following the amount that exceeds the limit	Add valid amount (cents) following the amount that exceeds the limit	PASS
deposit	R2	T3	--	--	PASS
deposit	R2	T4	--	--	PASS
deposit	R3	T1	Input does not include 000 following amount that would overflow daily limit	Include 000 after attempting to surpass limit	PASS
transfer	R1	T1	Input does not include valid account	Add two valid accounts to	PASS

			numbers following the invalid sender and recipient numbers; no valid accounts in valid accounts file	valid accounts file: 4206969 and 9999999; insert those numbers into each input block	
transfer	R1	T2	Program does not distinguish between which account (sender/receiver) exists and which does not	Add a check to each transfer method that discerns which number is nonexistent	PASS
transfer	R1	T3	Program does not distinguish between which account (sender/receiver) exists and which does not	Add a check to each transfer method that discerns which number is nonexistent	PASS
transfer	R1	T4	Test case does not test sender existence, instead tests recipient again	Modify test case input by reversing the numbers	PASS
transfer	R1	T5	--	--	PASS
transfer	R1	T6	--	--	PASS
transfer	R2	T1	No 000 value given after amount that exceeds limit, thus tests cannot be completed	Add 000 to input after invalid amount	PASS
transfer	R2	T2	No 000 value given after amount that exceeds limit, thus tests cannot be completed	Add 000 to input after invalid amount	PASS
transfer	R2	T3	No 000 value given after amount that	Add 000 to input after	PASS

			exceeds limit, thus tests cannot be completed	invalid amount	
transfer	R2	T4	No 000 value given after amount that exceeds limit, thus tests cannot be completed	Add 000 to input after invalid amount	PASS
transfer	R3	T1	--	--	PASS
withdraw	R1	T1	--	--	PASS
withdraw	R1	T2	--	--	PASS
withdraw	R2	T1	No number or amount given in test case	Add random invalid number and amount	PASS
withdraw	R2	T2	No number or amount given in test case	Add random invalid number and amount	PASS
withdraw	R3	T1	--	--	PASS
withdraw	R3	T2	--	--	PASS
withdraw	R4	T1	No valid account number or amount following invalid number	Add valid account number and amount following number	PASS
withdraw	R4	T2	No valid account number or amount following invalid number	Add valid account number and amount following number	PASS
withdraw	R4	T3	Program does not catch amounts that are not integers	Wrap each amount check with a try/except that accounts for the user not giving an integer	PASS
withdraw	R4	T4	--	--	PASS
withdraw	R5	T1	Program machine	Modify code to meet \$1,000 limit	PASS

			withdraw limit incorrect	instead of \$10,000	
withdraw	R5	T2	No 000 after invalid amount	Add 000 after invalid amount	PASS
withdraw	R6	T1	Test case does not test machine mode; test case does not breach limit	Redesign test case to threaten machine limit and then enter 000 to leave while loop and log out	PASS
withdraw	R6	T2	--	--	PASS
transactionssummaryfile	R1	T1	Program does not check line limit	Add check for line limit before each write to the transaction summary file	PASS
transactionssummaryfile	R1	T2	--	--	PASS
transactionssummaryfile	R1	T3	--	--	PASS
transactionssummaryfile	R1	T4	--	--	PASS
transactionssummaryfile	R1	T5	--	--	PASS
transactionssummaryfile	R1	T6	--	--	PASS
transactionssummaryfile	R1	T7	--	--	PASS
transactionssummaryfile	R1	T8	--	--	PASS
transactionssummaryfile	R1	T9	--	--	PASS
validaccountslistfile	R1	T1	Code did not inspect each number length	Redesigned valid accounts list to check length	PASS
validaccountslistfile	R1	T2	Code did not inspect each number length	Redesigned valid accounts list to check length	PASS
validaccountslistfile	R2	T1	Code did not inspect numbers to check for 0 beginning	Redesigned valid accounts list to check for 0 beginning	PASS
validaccountslistfile	R2	T2	Code did not inspect numbers	Redesigned valid accounts list	PASS

			to check for 0 beginning	to check for 0 beginning	
validaccountslistfile	R3	T1	Code did not inspect for mandatory special character	Redesigned valid accounts list to check for mandatory special character	PASS
validaccountslistfile	R3	T2	Code did not inspect each valid number	Redesigned valid accounts list check	PASS