Assignment 4: Back Office Rapid Prototype

Authors:

Anna Chulukov,   17avc2@queensu.ca, 20082947
Faranak Sharifi,   17fsb@queensu.ca, 20068900
Marwan ElKhodary,   m.elkhodary@queensu.ca, 20022212
Ryan Fernandes,   17rf@queensu.ca, 20067569

Function	Description
readTransFile()	This function takes in the first argument of the program, the transaction summary file, and returns the transactions as a list of strings.
readMaster()	This function takes in the second argument of the program, the master accounts file, and returns it as a dictionary.
writeMaster(masterAccountDict)	This function modifies and maintains the master accounts file in descending order of accountNum, and adds the content from the master account dictionary into the file with the right format.
newValidAccountList(masterAccountDict)	This function takes in the master account dictionary as a parameter and writes the account numbers that are in it to the valid accounts list with the format specified in the assignment description.
deposit(masterAccountDict, accountNum, amount)	This function takes in the master account dictionary, an account Number and an amount. It changes the balance for an account in the dictionary by adding (depositing) the amount to it
withdraw(masterAccountDict, accountNum, amount)	This function takes in the master account dictionary, an account Number and an amount and changes the balance for an account in the dictionary by minusing (withdrawing) the amount to it
transfer(masterAccountDict, destAccount, fromAccount, amount)	This function takes in the master account dictionary, two account Numbers and an amount and changes the balances for two accounts in the dictionary by minusing the amount from the origin account and adding the amount to the destination account
createAccount(masterAccountDict, accountNum, accountName)	This function takes in the master account dictionary, an account Number and account name and updates the master account dictionary, adding a new account into the master accounts file.

deleteAccount(masterAccountDict, accountNum, accountName)	This function takes in the master account dictionary, an account number and account name as parameters. It then parses throuugh the dictionary and deletes the account as specified and returns the updated master account dictionary
main()	The top most level function, it reads the input files and creates a master account dictionary and a transaction list. Furthermore, the function carries out the process of the program by going through the transaction list and checking the first 3 character code to update the master account dictionary accordingly.