Basic Block Testing for Account Creation Transactions

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```python
# The process for create account transactions to master list
def processCreate(self, toAccount, amount, fromAccount, name):
    name = name.strip()
    match, idx = self.binarySearch(toAccount)
    if match:        # account already exist
        print(f"Transaction: NEW {toAccount} {amount} {fromAccount} {name} is invalid!")
        print("Due to: account already exists!")
        return False
    else:
        updateInfo = f" {toAccount}  000  {name}\n"
        if self.checkUpdateInfo(updateInfo):
            self.insertToList(updateInfo, idx)
            self.length += 1
        else:
            print(f"Transaction: NEW {toAccount} {amount} {fromAccount} {name} is invalid!")
            print("Due to: invalid length!")
            return False
    return True
```

```python
# find target account and then return it's index (if not find, return the index which can insert the
# targetAccount in the ascending order master list)
def binarySearch(self, targetAccount):
    targetAccount = int(targetAccount)
    start = 0
    end = self.length - 1
    # prepare for the return when not find the account number
    middle = (start + end) // 2
    while start <= end:
        middle = (start + end) // 2
        account = self.masterList[middle][:7]
        if targetAccount == int(account):
            return True, middle
        elif targetAccount > int(account):
            end = middle - 1
        else:
            start = middle + 1
    return False, middle
```

```python
# new line in master account file should < 47 characters
def checkUpdateInfo(self, updateInfo):
    return len(updateInfo) <= 47
```

```python
# insert the new line to the master list with specific index
def insertToList(self, newClient, startIdx):
11    newAccount = newClient[:7]                      # first 7 digits are account number
      account = self.masterList[startIdx][:7]
      if newAccount < account:
12        self.masterList.insert(startIdx+1, newClient)
      else:
13        self.masterList.insert(startIdx, newClient)
```

Test Table for Basic Block Testing:

Test No.	Block include	Test Input (Transaction)	Important Variable Values	Description	Terminal Output
T1.0	1, 2, 3, 4, 7	NEW 1000500 000 0000000 Account02	Block 1: match -> True Block 1: idx -> 1	Unsuccessfully account creation, due to account already exists	Transaction: NEW 1000500 000 0000000 Account02 is invalid! Due to: account already exists! program terminated!
T1.1	1, 2, 3, 5, 6, 8, 9, 10, 11, 12	NEW 1000550 000 0000000 Account04	Block 1: match -> False Block 1: idx -> 0 Block 8: checkUpdateInfo(updateInfo) -> True Block 11: (newAccount < account) -> True	Successfully account creation, the created account is in the second line of the new master file	None
T1.2	1, 2, 3, 5, 8, 9, 10, 11, 13	NEW 1000650 000 0000000 Account04	Block 1: match -> False Block 1: idx -> 0 Block 8: checkUpdateInfo(updateInfo) -> True Block 11: (newAccount < account) -> False	Successfully account creation, the created account is in the first line of the new master file	None
T1.3	1, 2, 3, 5, 6, 8, 9, 14	NEW 1000550 000 0000000 Account04aaaaa-aaaaaaaaaaaaaa-aaaaaaaaaaaaaa-aaaaaaaa	Block 1: match -> False Block 1: idx -> 0 Block 8: checkUpdateInfo(updateInfo) -> False	Unsuccessfully account creation, due to invalid length	Transaction: NEW 1000550 000 0000000 Account04aaaaaaaaaaaaaaaaaaa-aaaaaaaaaaaaaaaaaaaaaaaa is invalid! Due to: invalid length! program terminated!
All blocks (1 to 14) are covered in the tests					