### Instructions to set up the data base:

- Create a Database and call it ChannelAssist\_BankDB

- Run the SQL Query **it will initial add data as well.**

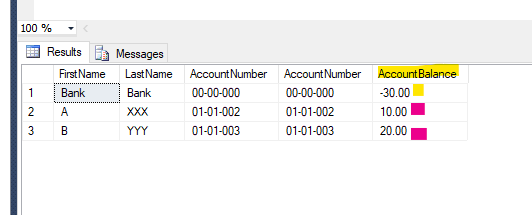
To See the list of Accounts and their balance run: GetAllAccountsBalance

To search an account by FirstName/ last name or FirsName LastName run: GetAccountBalanceByName

Each Stored procedure has a short description with a sample params to run.

**Implementation Approach**

* We have a Bank Account which is our Bank, the value of bank is always negative and is equal to sum of all the other accounts.
* Bank Takes the money from Customers and it becomes negative as much as it’s taken.
* in Our Data base we have two records A and B A has $10 and B has $20, so Bank has -$30 it goes: -30 + 10 + 20 = 0 This is an even balance;
* Banks close their account at the end of each day if this is zero. I’ve initialized with some sample data.



#### **Transferring Funds**

* Stored procedure to transfer funds between to accounts: InsTransferBillingAmmount
* Example: Exec InsTransferBillingAmmount 3,8, 2,2, 5.25, 2,' Transfer from B to A $5.25'
* It Transfer funds and runs a select query to show the result, you can keep running it till you get the error.
* We have a scalar function to check the balance.

FROM Customer 3 of their account number 8 TO Customer 2 to their Account ID: 2 Amount: $5.25 Transaction Type: 2 Also has a Comment (Adds it automatically.)

**Reseting Data**

* To reset data delete every thing that does not start with Deposit or withdraw from BillingTransaction

**Transaction Definition**

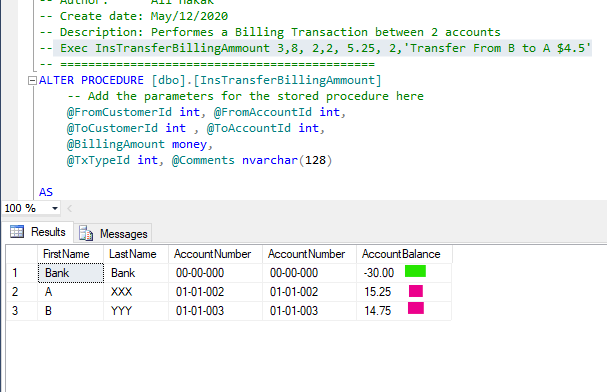
Each Transaction defines two records:

* Billing Amount Deposited to the Destination Account (Positive amount +)
* Billing Amount Withdrawn from the Source Account (Negative amount -)
* IF we can Transfer will show the overall balance of all (I put it this way to make it easier to review) The Even condition with Bank over all Balance should be always true.

+ Billing Amount Deposited to the Destination Account

- Billing Amount Withdrawn from the Source Account

IF it can Transfer will show the overall balance of all (I put it this way to make it easier to review) The Balanced condition with **Bank + Sum(Other Accounts) = 0**  should be always true.



IF you request to transfer more than remaining balance it raises below error:

