Challenge 4 - Finance Analysis

Intro

You are a Finance Analyst working for 'The Big Bank'

You have been tasked with finding out about your customers and their banking behaviour. Examine the accounts they hold and the type of transactions they make to develop greater insight into your customers.

Tables

Here are the tables you will be using

Customers

CustomerID	FirstName	LastName	City	State
1	John	Doe	New York	NY
2	Jane	Doe	New York	NY
3	Bob	Smith	San Francisco	CA
4	Alice	Johnson	San Francisco	CA
5	Michael	Lee	Los Angeles	CA
6	Jennifer	Wang	Los Angeles	CA

Accounts

AccountID	CustomerID	BranchID	AccountType	Balance
1	1	5	Checking	1000
2	1	5	Savings	5000
3	2	1	Checking	2500
4	2	1	Savings	####
5	3	2	Checking	7500
6	3	2	Savings	####
7	4	8	Checking	5000
8	4	8	Savings	####
9	5	14	Checking	####
10	5	14	Savings	####
11	6	2	Checking	5000
12	6	2	Savings	####
13	1	5	Credit Card	-500
14	2	1	Credit Card	-1000
15	3	2	Credit Card	-2000

Transactions

TransactionID	AccoutID	TransactionDate	Amount
1	1	2022-01-01	-500
2	1	2022-01-02	-250
3	2	2022-01-03	1000
4	3	2022-01-04	-1000
5	3	2022-01-05	500
6	4	2022-01-06	1000
7	4	2022-01-07	-500
8	5	2022-01-08	-2500
9	6	2022-01-09	500
10	6	2022-01-10	-1000
11	7	2022-01-11	-500
12	7	2022-01-12	-250
13	8	2022-01-13	1000
14	8	2022-01-14	-1000
15	9	2022-01-15	500

Branches

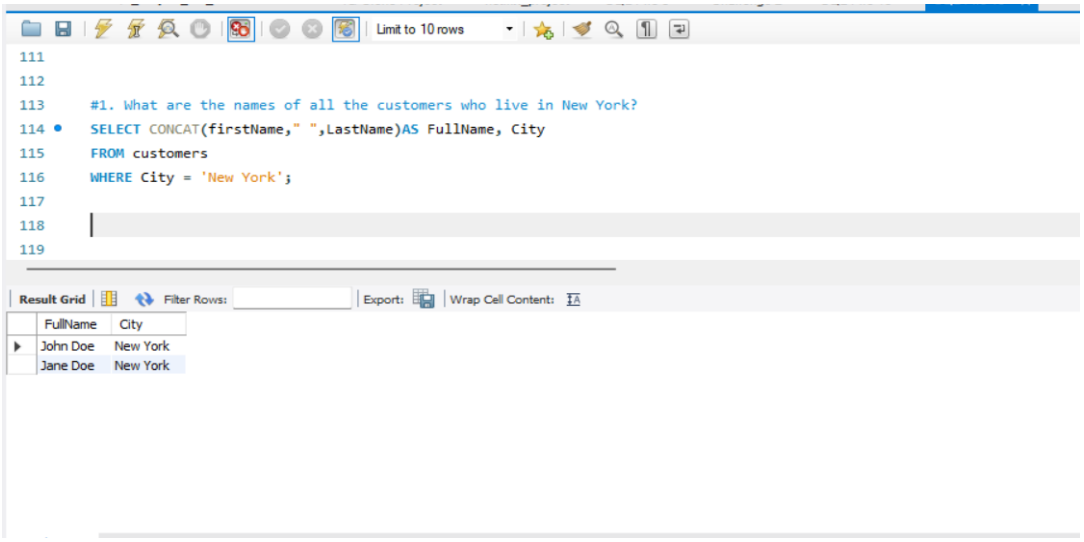
BranchID	BranchName	City	State
1	Main	New York	NY
2	Downtown	San Francisco	CA
3	West LA	Los Angeles	CA
4	East LA	Los Angeles	CA
5	Uptown	New York	NY
6	Financial District	San Francisco	CA
7	Midtown	New York	NY
8	South Bay	San Francisco	CA
9	Downtown	Los Angeles	CA
10	Chinatown	New York	NY
11	Marina	San Francisco	CA
12	Beverly Hills	Los Angeles	CA
13	Brooklyn	New York	NY
14	North Beach	San Francisco	CA
15	Pasadena	Los Angeles	CA

Questions

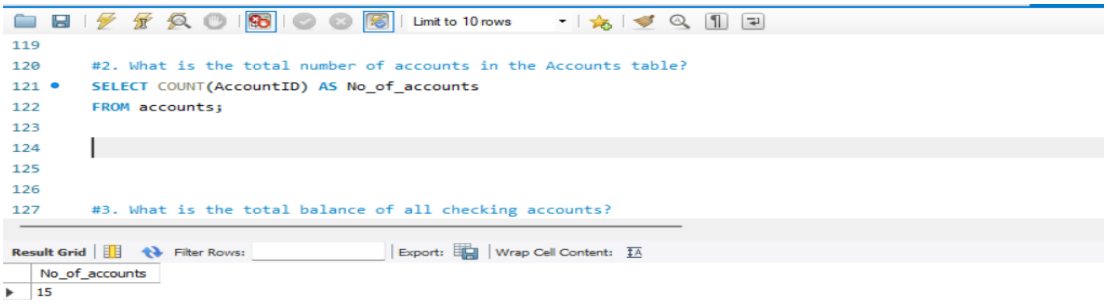
Answer the following questions

Then write a LinkedIn post saying what you have learnt or enjoyed

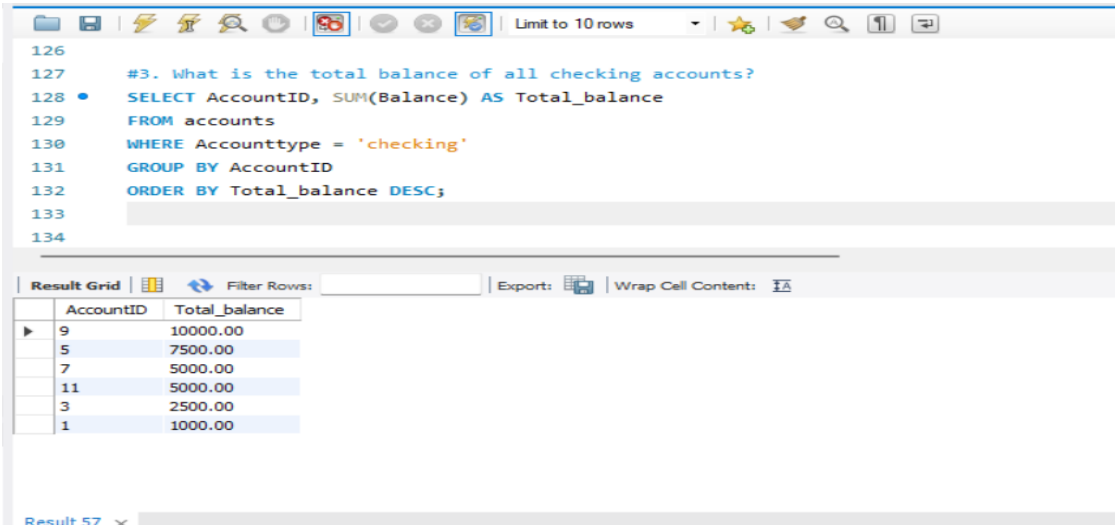
1. What are the names of all the customers who live in New York?



2. What is the total number of accounts in the Accounts table?



3. What is the total balance of all checking accounts?

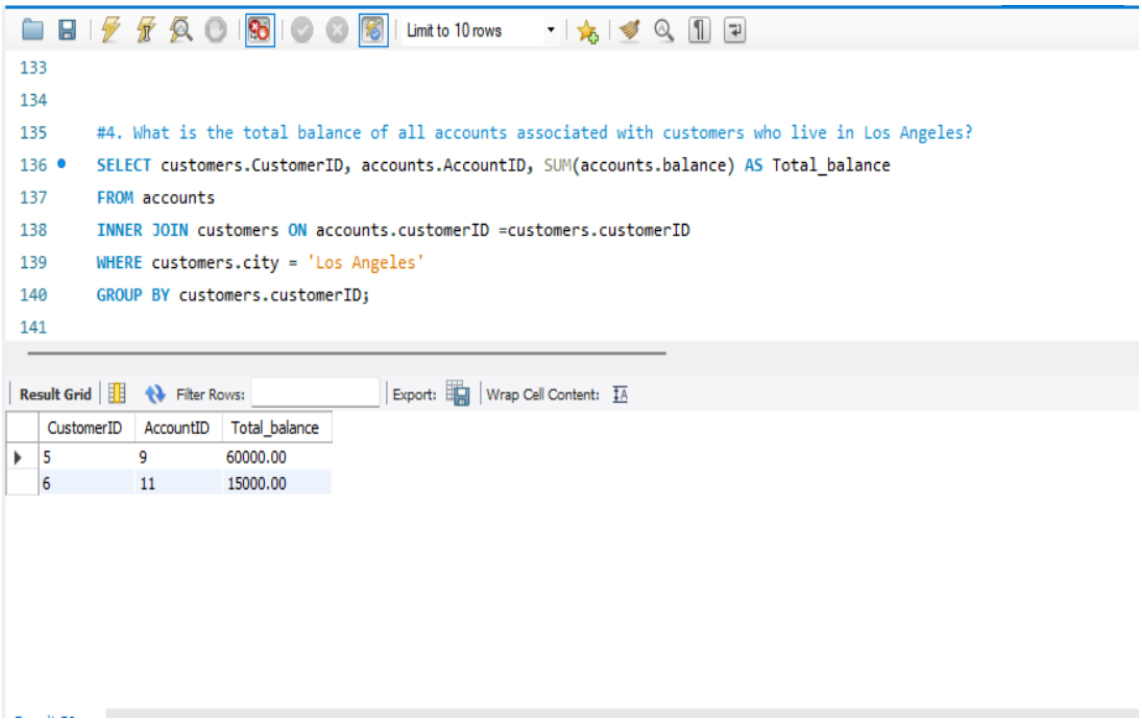


```
126
127     #3. What is the total balance of all checking accounts?
128 •   SELECT AccountID, SUM(Balance) AS Total_balance
129     FROM accounts
130     WHERE Accounttype = 'checking'
131     GROUP BY AccountID
132     ORDER BY Total_balance DESC;
133
134
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

AccountID	Total_balance
9	10000.00
5	7500.00
7	5000.00
11	5000.00
3	2500.00
1	1000.00

4. What is the total balance of all accounts associated with customers who live in Los Angeles?

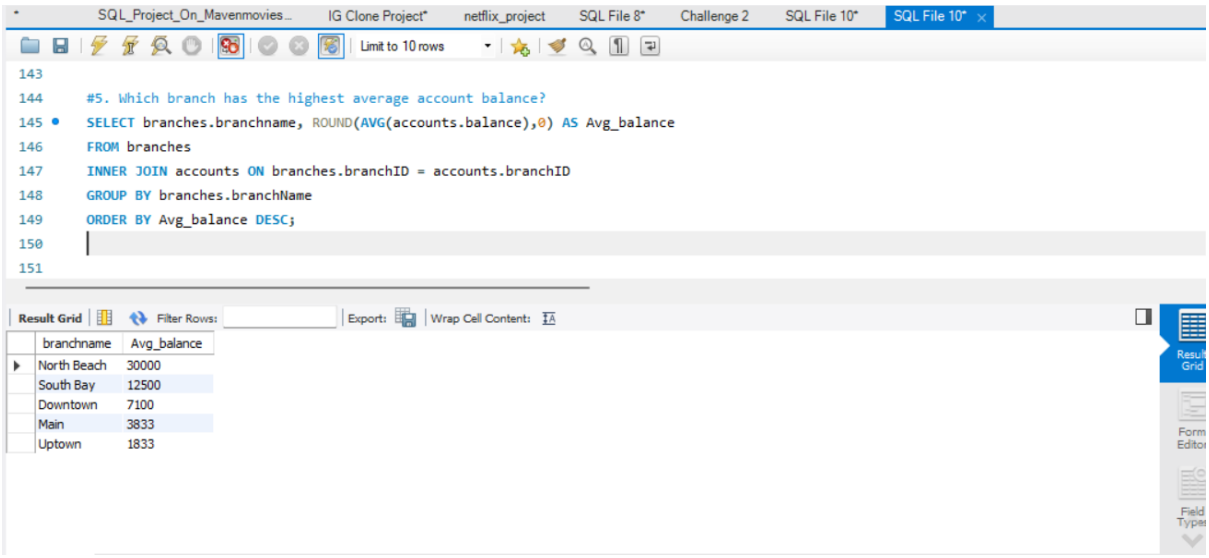


```
133
134
135     #4. What is the total balance of all accounts associated with customers who live in Los Angeles?
136 •   SELECT customers.CustomerID, accounts.AccountID, SUM(accounts.balance) AS Total_balance
137     FROM accounts
138     INNER JOIN customers ON accounts.customerID =customers.customerID
139     WHERE customers.city = 'Los Angeles'
140     GROUP BY customers.customerID;
141
```

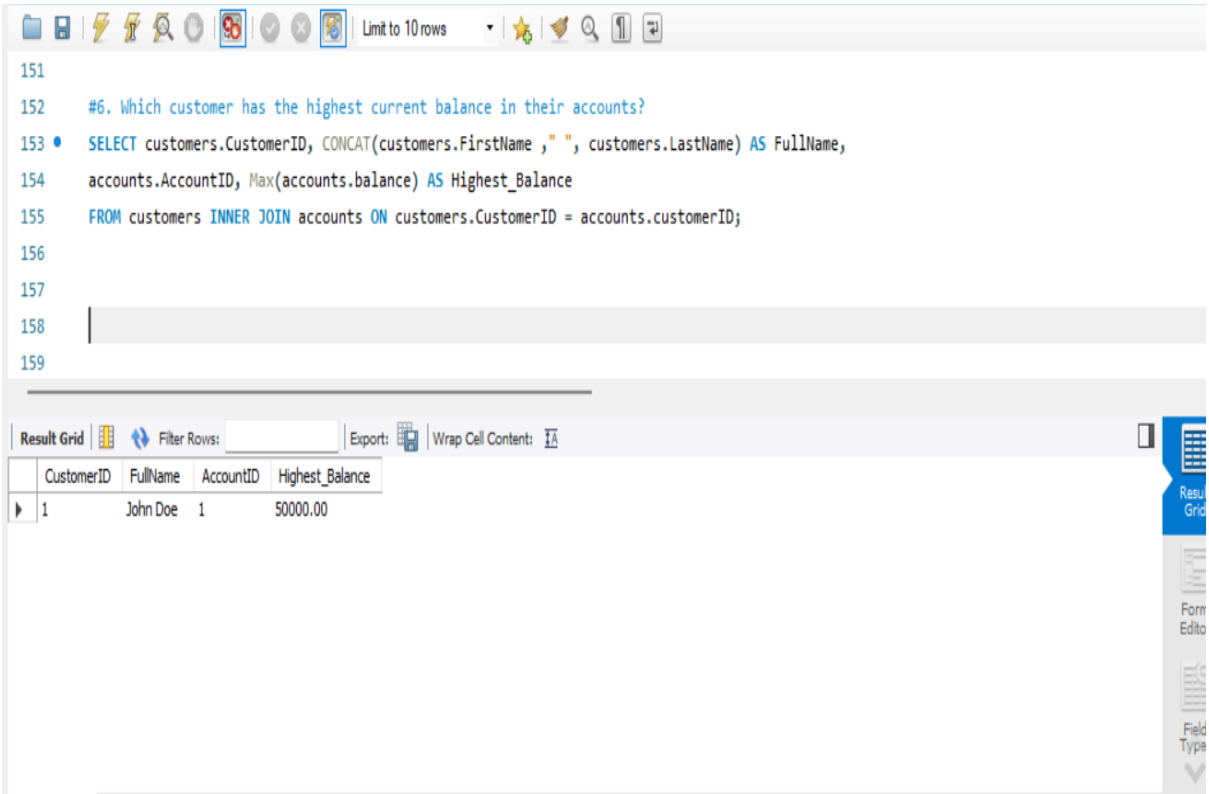
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

CustomerID	AccountID	Total_balance
5	9	60000.00
6	11	15000.00

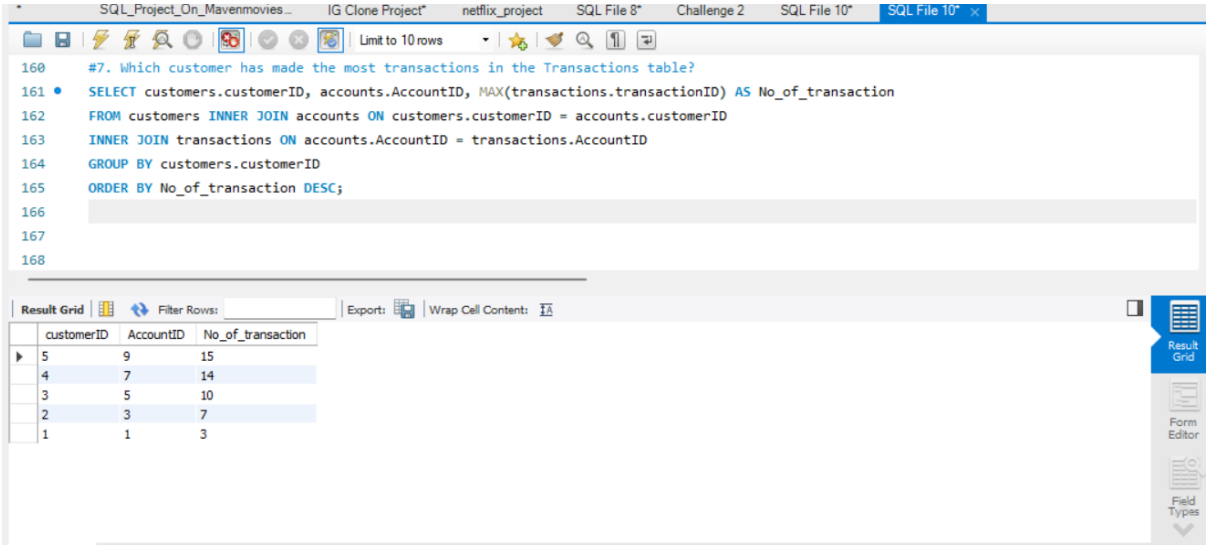
5. Which branch has the highest average account balance?



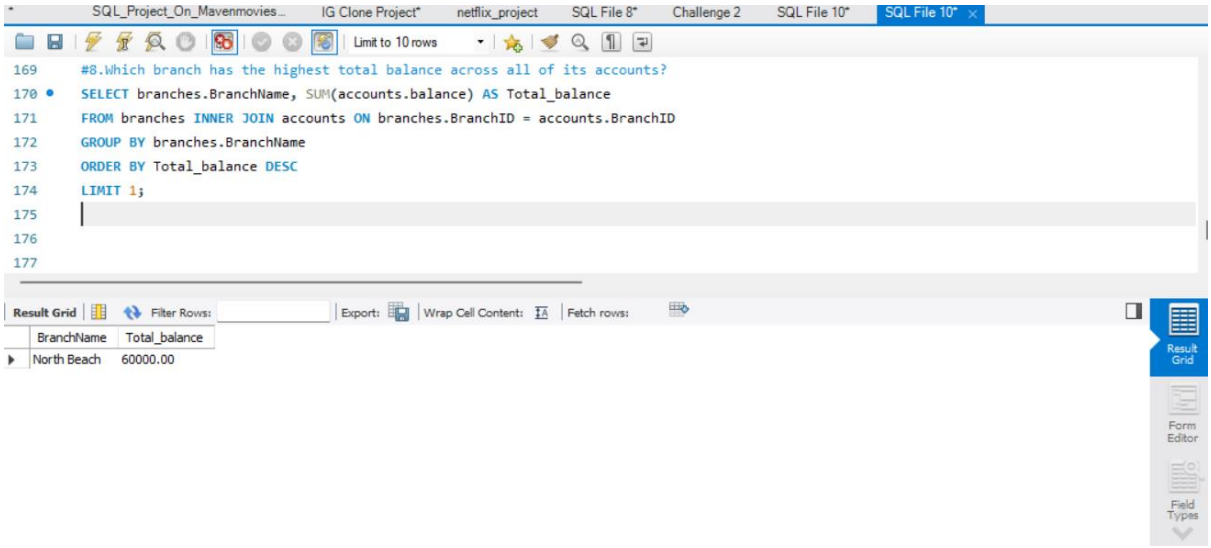
6. Which customer has the highest current balance in their accounts?



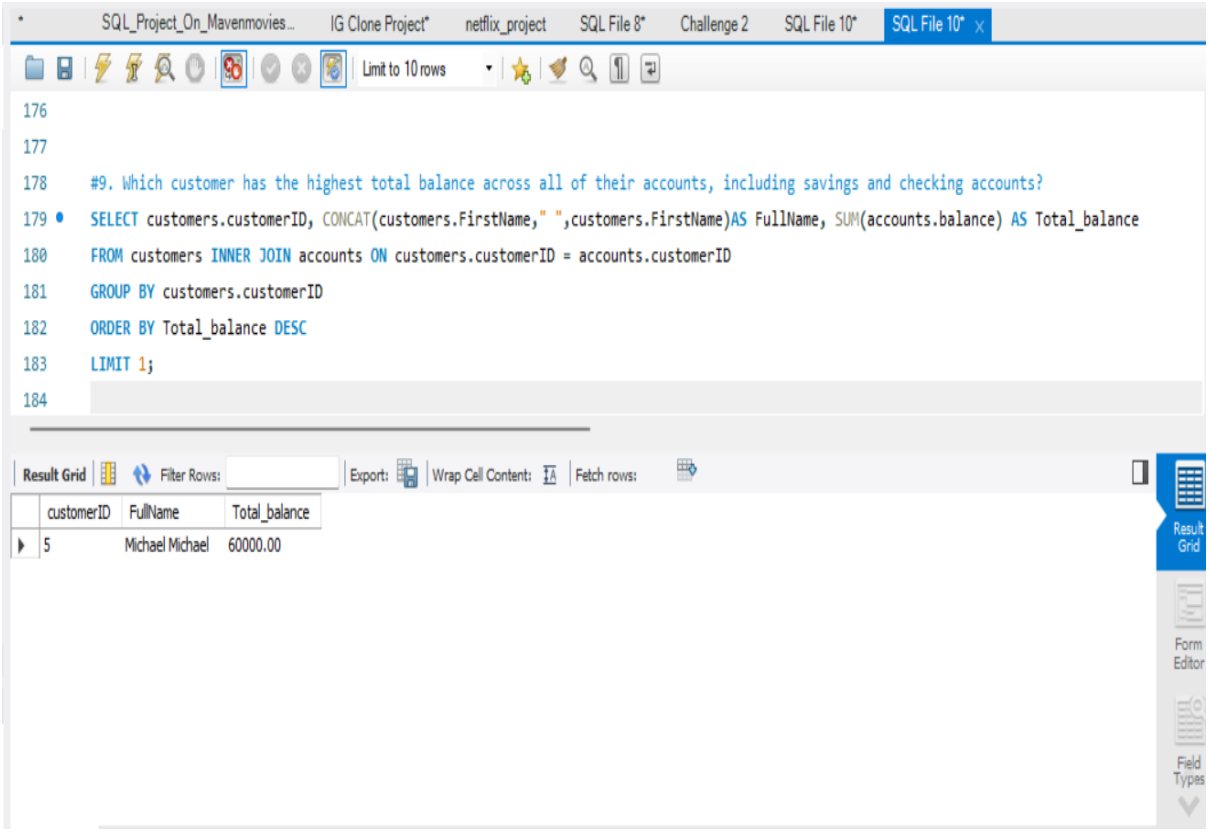
7. Which customer has made the most transactions in the Transactions table?



8.Which branch has the highest total balance across all of its accounts?



9. Which customer has the highest total balance across all of their accounts, including savings and checking accounts?



10. Which branch has the highest number of transactions in the Transactions table?