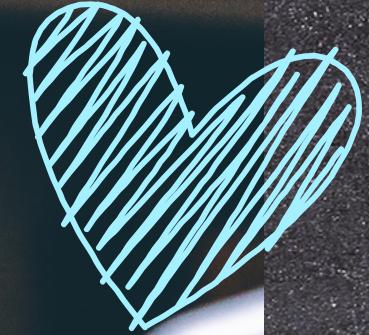


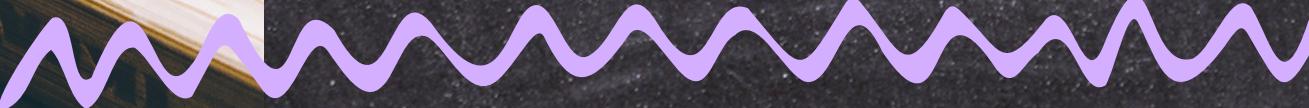
# SQL CHALLENGE FINANCE ANALYSIS





# Challenge

As a Finance Analyst working for 'The Big Bank' my task was to find out about customers and their banking behaviour.





# Tables

Accounts

Branches

Customers

Transactions



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

```
125      #1)What are the names of all the customers who live in New York?  
126 •  select firstname , lastname , city from customers  
127      where city="new york";  
128  
129  
130  
131
```

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

	firstname	lastname	city
▶	John	Doe	New York
	Jane	Doe	New York



# What is the total number of accounts in the Accounts table?

```
128  
129      #2)What is the total number of accounts in the Accounts table?  
130 •   select count(accountid) as total_number_of_accounts from accounts;  
131  
132  
133
```

---

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

	total_number_of_accounts
▶	15

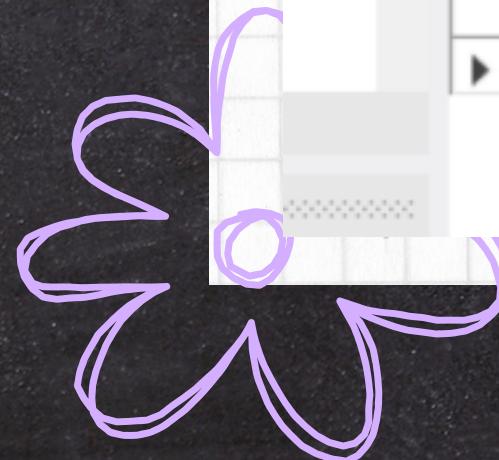
What is the total balance of all checking accounts?

```
131  
132  
133      #3)What is the total balance of all checking accounts?  
134 •  select sum(balance) , accounttype from accounts  
135      where accounttype="checking";  
136  
137
```

---

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

sum(balance)	accounttype
31000.00	Checking



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

```
136      #4)What is the total balance of all accounts associated with customers who live in Los Angeles?  
137 •  select city , sum(balance) as total_balance  from customers  
138    inner join accounts  
139    on  
140    customers.customerid=accounts.customerid  
141    where city="los angeles";  
142  
143  
144
```

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

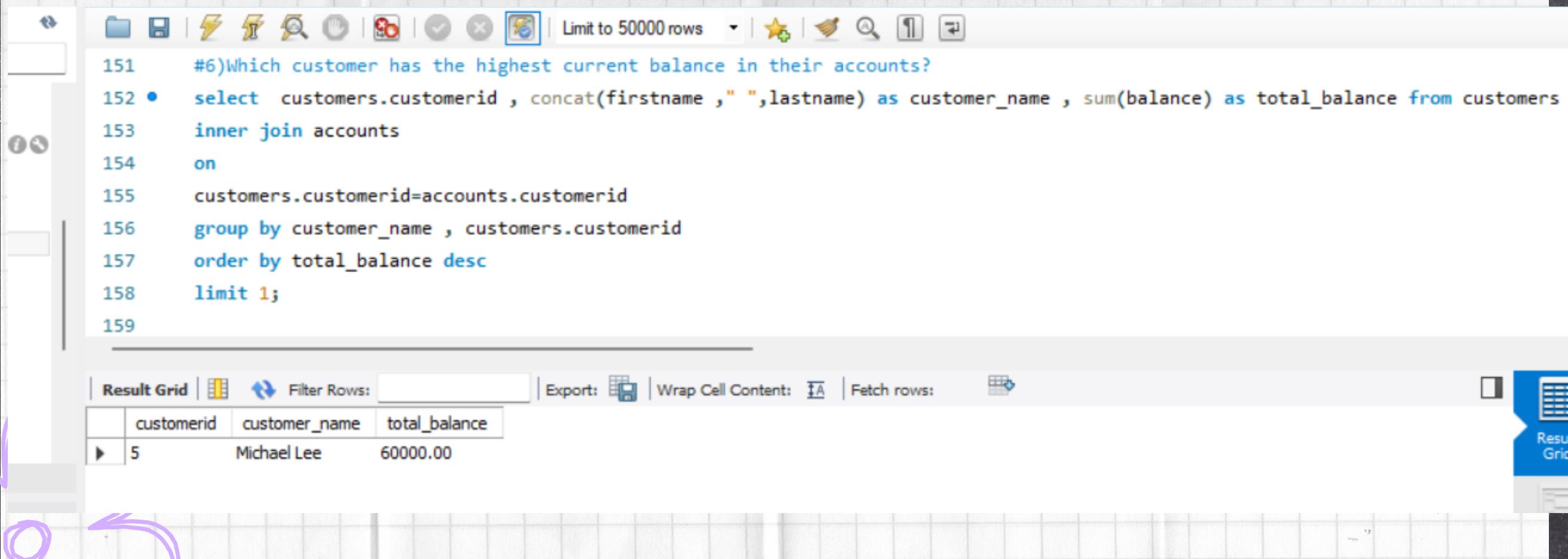
city	total_balance
Los Angeles	75000.00

# Which branch has the highest average account balance?

```
144      #5)Which branch has the highest average account balance?  
145 •  select branchname , round(avg(balance)) as highest_avg_balance  from branches  
146    inner join accounts  
147    on  
148    branches.branchid=accounts.branchid  
149    group by branchname  
150    order by highest_avg_balance desc  
151    limit 1;  
152
```

branchname	highest_avg_balance
North Beach	30000

# Which customer has the highest current balance in their accounts?

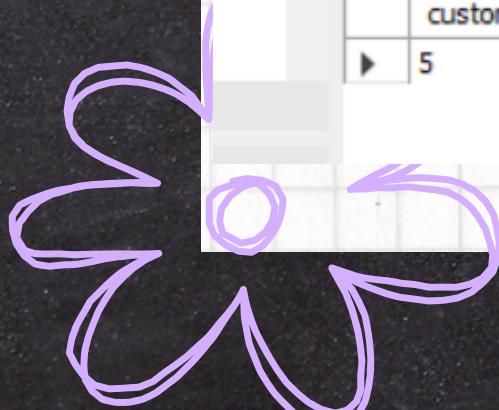


```
151 #6)Which customer has the highest current balance in their accounts?
152 • select customers.customerid , concat(firstname , " ",lastname) as customer_name , sum(balance) as total_balance from customers
153 inner join accounts
154 on
155 customers.customerid=accounts.customerid
156 group by customer_name , customers.customerid
157 order by total_balance desc
158 limit 1;
159
```

The screenshot shows a MySQL query editor window. At the top, there are various icons for file operations, search, and refresh. A dropdown menu says "Limit to 50000 rows". Below the code area, there are two tabs: "Result Grid" and "SQL Editor". The "Result Grid" tab is selected, showing a single row of data:

	customerid	customer_name	total_balance
▶	5	Michael Lee	60000.00

At the bottom right of the result grid, there is a blue button labeled "Result Grid".



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

```
160  #7)Which customer has made the most transactions in the Transactions table?  
161 •  select customers.customerid , concat(firstname , " ",lastname) as customer_name , count(transactionid)as total_transactions  
162   from customers  
163   inner join accounts  
164   on  
165     customers.customerid=accounts.customerid  
166   inner join transactions  
167   on transactions.accountid=accounts.accountid  
168   group by customer_name , customers.customerid  
169   order by total_transactions desc  
170   limit 1;
```

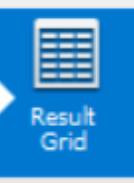
customerid	customer_name	total_transactions
2	Jane Doe	4



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

```
184  #9)Which customer has the highest total balance across all of their accounts, including savings and checking accounts?  
185 • select customers.customerid , concat(firstname , " " ,lastname) as customer_name , sum(balance) as highest_total_balance  
186   from customers  
187   inner join accounts  
188   on  
189   customers.customerid=accounts.customerid  
190   group by customers.customerid , customer_name  
191   order by highest_total_balance desc  
192   limit 1 ;  
193  
194  
195
```

customerid	customer_name	highest_total_balance
5	Michael Lee	60000.00



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

```
197  #10)Which branch has the highest number of transactions in the Transactions table?
198 •  SELECT branches.branchname, COUNT(transactions.transactionid) AS number_of_transactions FROM branches
199   INNER JOIN accounts
200     ON
201       branches.branchid = accounts.branchid
202   INNER JOIN transactions
203     ON
204       accounts.accountid = transactions.accountid
205   GROUP BY branches.branchname
206   ORDER BY number_of_transactions DESC
207   limit 1 ;
```

branchname	number_of_transactions
Main	4

THANK  
YOU