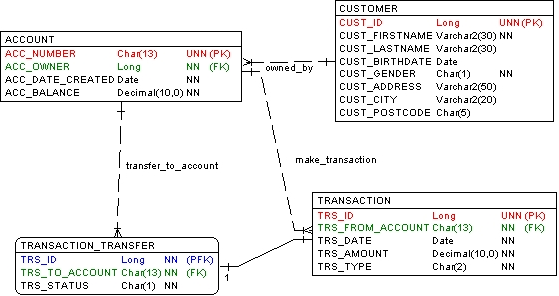
# Structured Query Language (SQL)



Note:

UNN : Unique, Not Null PK : Primary Key

FK : Foreign Key NN : Not Null

Table description:

1. CUSTOMER: contains all bank customer data

The column CUST\_GENDER is set to 1 for male and 2 for female.

1. ACCOUNT: contains all customer accounts

The column ACC\_OWNER is the Foreign Key which refers to the column CUST\_ID of the table CUSTOMER.

1. TRANSACTION: records all transactions.

The column TRS\_TYPE contains the transaction type with possible values:

* 1. DB: for debit transaction.
  2. CR: for credit transaction.
  3. TF: for money transfer. The column TRS\_FROM\_ACCOUNT contains the source account.

1. TRANSACTION\_TRANSFER: contains additional information if the transaction is money transfer.

The column TRS\_STATUS contains one of the following values:

* 1. 0: if transaction is not executed yet
  2. 1: if transaction is executed successfully
  3. -1: if transaction is failed (e.g. the balance of source account (TRS\_FROM\_ACCOUNT) is not available)

# Questions

Create SQL queries for the following requirements:

1. Recapitulation of number of accounts owned by every customer.

Answer:

SELECT customer.cust\_firstname, COUNT(account.acc\_number)

FROM ACCOUNT

INNER JOIN customer ON account.acc\_owner = customer.cust\_id

GROUP BY customer. firstname

1. All transactions created by John Michael sorted by account number and transaction date

Answer:

SELECT transaction.trs\_amount,transaction.trs\_from\_account,transaction.trs\_date,transaction.trs\_type

FROM TRANSACTION

JOIN ACCOUNT

ON transaction.trs\_from\_account= account.acc\_number

JOIN customer

ON account.acc\_owner = customer.cust\_id

WHERE customer.cust\_firstname = 'John Michael'

ORDER BY transaction.trs\_date ASC , transaction.trs\_from\_account ASC