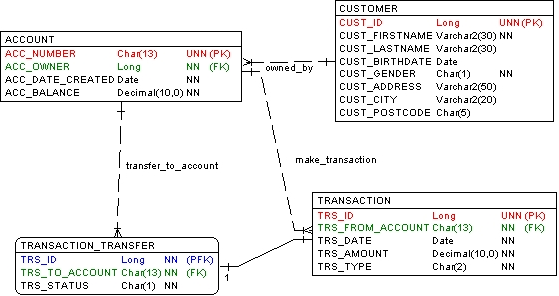
# Structured Query Language (SQL)



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 C.CUST\_ID, C.CUST\_FIRSTNAME, C.CUST\_LASTNAME , Count(\*) as JUMLAH\_ACCOUNT

FROM Customer C

JOIN ACCOUNT A ON C.CUST\_ID=A.ACC\_OWNER

Group BY C.CUST\_ID;

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

Answer:   
SELECT

CUSTOMER.CUST\_FIRSTNAME,

CUSTOMER.CUST\_LASTNAME,

ACCOUNT.ACC\_NUMBER,

TRANSACTION.TRS\_DATE

FROM customer

JOIN ACCOUNT

ON CUSTOMER.CUST\_ID = ACCOUNT.ACC\_OWNER

JOIN TRANSACTION

ON ACCOUNT.ACC\_NUMBER = TRANSACTION.TRS\_FROM\_ACCOUNT;

WHERE CUSTOMER.CUST\_FIRSTNAME = 'John' AND CUSTOMER.CUST\_LASTNAME = 'Michael'

ORDER BY ACCOUNT.ACC\_OWNER AND TRANSACTION.TRS\_DATE