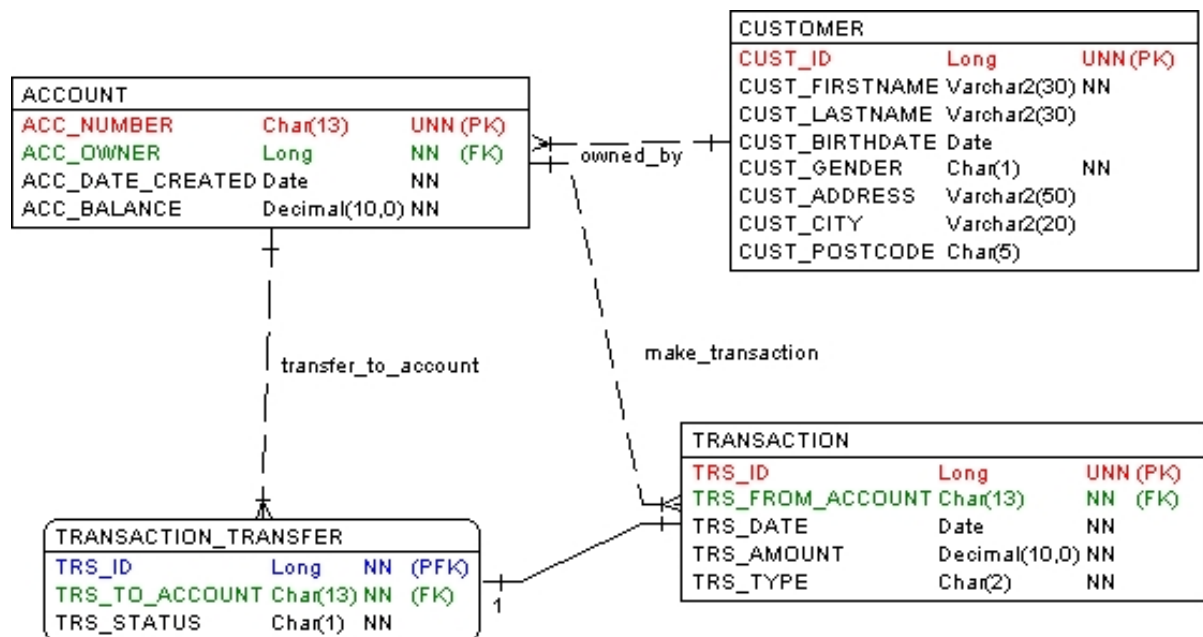


## Structured Query Language (SQL)



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.
2. ACCOUNT: contains all customer accounts

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

3. TRANSACTION: records all transactions.

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

- a. DB: for debit transaction.
- b. CR: for credit transaction.
- c. TF: for money transfer. The column TRS\_FROM\_ACCOUNT contains the source account.

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

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

- a. 0: if transaction is not executed yet
- b. 1: if transaction is executed successfully
- c. -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 * from account a
left join costumer c on c.id = a.acc_owner;
```

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

Answer:

```
select * from transaction t
left join account a on a.acc_number = t.trs_from_account
left join costumer c on c.id = a.acc_owner
where c.cust_first_name = 'Dummy 1';
```