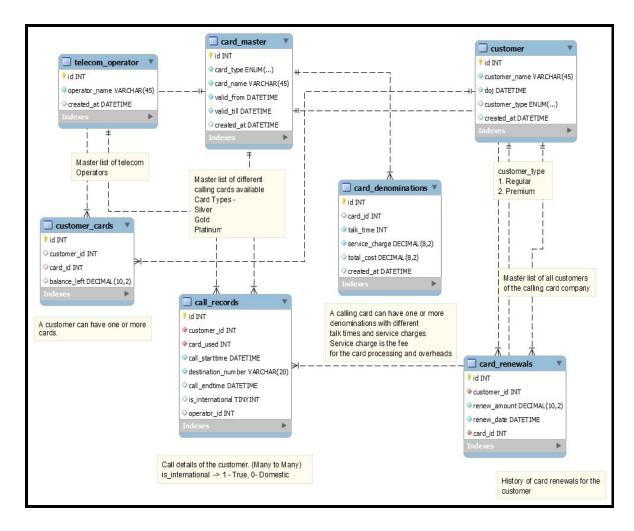
#### **Task 1:**

A certain telecom company issues calling cards of various denominations and types. The customer can buy a card and use them to make a call. The card can be renewed on expiration of the amount on the card. A customer can have more than one card in his account. The call duration, the card used for the call, the time of call are recorded. Review the data model below and answer the following questions:



- Q1. Write a query to find the list customer\_name, customer\_id, different cards owned and balance left on each card for all Premium customers?
- Q2. List the total renews of customers by different card types. Output should contain customer\_id, card\_type, card\_name and total renewd\_amount?
- Q3. List total calls made between 4th April 2018 and 5th May 2018 for all premium customers whose call duration is greater than 10 minutes by day. Output should contain total calls, date?

Q4. List total calls, card used, total call duration, customer name, current card balance for all customers for the month of April 2018 by customer, card type?

## Task 2:

Q1. What are different types of joins?

Given the table structure below, illustrate each join -

# Faq\_questions

Id (pk)
Question (unique)
Is\_visible
Created\_at

### Category\_faq\_mapping

Id (pk)
Category\_id
Faq\_id (Fk from faq\_questions)
Is\_visible
Faq\_type
Created\_at

### Category\_answers

Id (pk)
Answer
faq\_mapping\_id(fk from category\_faq\_mapping)
Created\_at

### partner\_questions

ld (pk)

Partner\_id

Faq\_mapping\_id (Fk from category\_faq\_mapping)

- Q2. Display all faq\_id, questions for a given partner\_id. What kind of join is it?
- Q3. Display questions, partner\_id for a given category\_id and all partners?
- Q4. Display question\_id, question, answer\_id, answer for all partners?

#### Task 3:

Consider the table structure:

**Orders** 

Order\_id pk

Order\_type enum('Food','Bus','Recharge','Cabs') [ Means category]

Order\_date

Company\_id enum('Ola','Uber','Ezpay','Redbus','Swiggy','Zomato')

Customer\_id

Order\_value

Order\_status enum('Pending','Cancelled','Success','Wait On Merchant')

**Discount** 

- Q1. Get total orders and total order value per day for the month of March 2018?
- Q2. Get Total orders, order value per day for the month of March 2018 for each order type?
- Q3. Get average order\_value for the month of March 2018 for all successful orders for each category?

### Task 4: Write steps or queries

Consider these tables:

- > Orders (order\_id,category\_id,customer\_id,order\_date,order\_value,discount)
- > Customer (customer\_id,customer\_name,mobile,email)
- > Categories (category\_id,category\_name,desc)

Write all the steps to create an aggregated table with the following fields:

> Table 1 (A flat table which contains the following information)

Customer\_name,cutsomer\_email,category\_name,order\_value,order\_date,order\_id

> Table 2 (Total discount value availed by customer - Aggregated table)

Customer\_name,customer\_email,total\_discount

> Table 3 (Month and category wise order\_value - Aggregated table)

Month,category\_name,total\_order\_value