

## SQL PROJECT - Payment Service Provider (PSP)

### Description:

We have the transaction database of the merchants of a Payment Service Provider (PSP) company, this company offers different products (model\_services): POS, Payment Gateway and Payment Link. Additionally, its merchants are divided by Corp, Medium, Small and Micro segments. A single company (a single RUC) can have more than one merchant, in case they use more than one product (i.e., one merchant\_id for POS and another one for Pago Link).

The data tables are shown below:

#### *Merchants*

merchant_id	Merchant ID
merchant_name	Merchant's company name
merchant_ruc	Merchant's RUC
model_service	Type of product used by the merchant

#### *Transactions*

merchant_id	Merchant ID
month_trx	Month of transactions
gpv_usd	Total amount for the month (\$) for the merchant
count_trx	Number of transactions for the month for the merchant

#### *RUC\_segment*

merchant_ruc	Merchant's RUC
segment	Merchant segment (Micro, Small, Medium, Corp)

### Requested:

1. Create a table with all the columns (unified table) of the 3 tables (without repeating). The granularity is monthly per merchant (as in the transaction table).
2. Answer the following questions, keeping in mind that when asked for the merchant, use merchant\_name, not merchant\_id:
  - 2.1. Which merchant had the highest GPV in August 2020? How much was the value, how many products does it use and note if more than one?
  - 2.2. Which segment had the highest number of transactions in the first quarter of 2021?
  - 2.3. Which merchant has the longest tenure (i.e., the one who has had the most months from when he started to his last month of transactions)?
  - 2.4. For each model service:
    - 2.4.1. Which is the month with the highest volume of transactions (Number of transactions, NOT amount)?
    - 2.4.2. How much was the average transaction (in dollars)?