## **Problem**

A pizza company owned 100 outlets across the country at the beginning of 2021. The company would like to know at any given point in time how many outlets are open. An outlet is considered "closed" if it has had no transactions for 30 consecutive days. Outlets can re-open.

Using the sample data provided, create a dataset to be able to answer this question. Please provide a solution using both python and SQL languages.

## Sample Data

The sample data contains 2 years of data (approximately 55k records)

It contains the following columns:

• shop\_id: unique identifier for each outlet

• date: date the transactions occurred

• n\_trans: number of transactions

## **Example**

Here is an example of the expected dataset for one of the outlets:

SHOP_ID	STATUS	LOWER_RANGE	UPPER_RANGE
5	open	1/01/2021	23/09/2021
5	clsd	24/09/2021	16/12/2021
5	open	17/12/2021	

(when upper\_range is null this indicates the status is current)