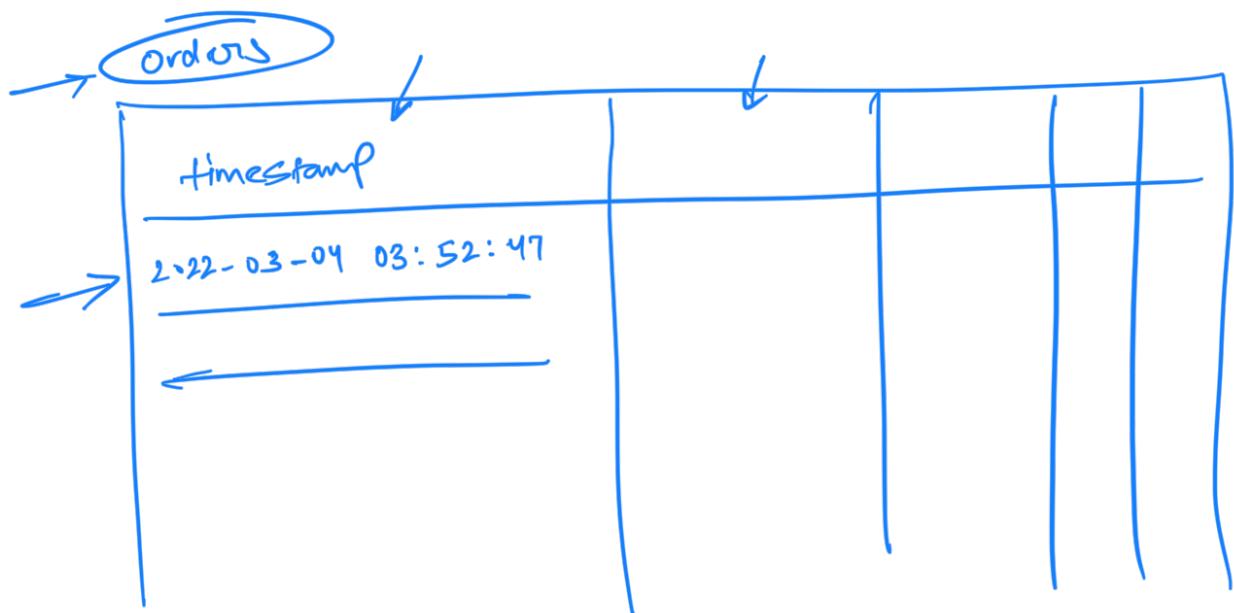


DATE & TIME FUNCTIONS



%Y → 4-digit year

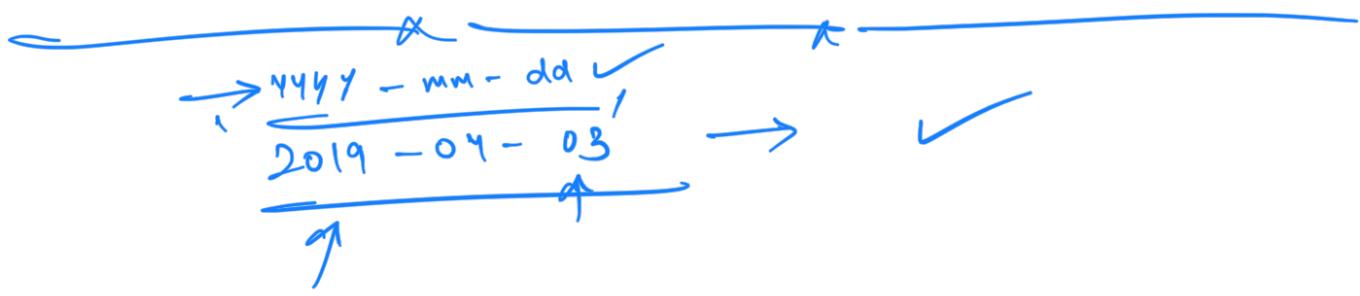
%m → 2-digit month

%d → 2-digit day

%H → hour

%i → minutes

%P → AM / PM

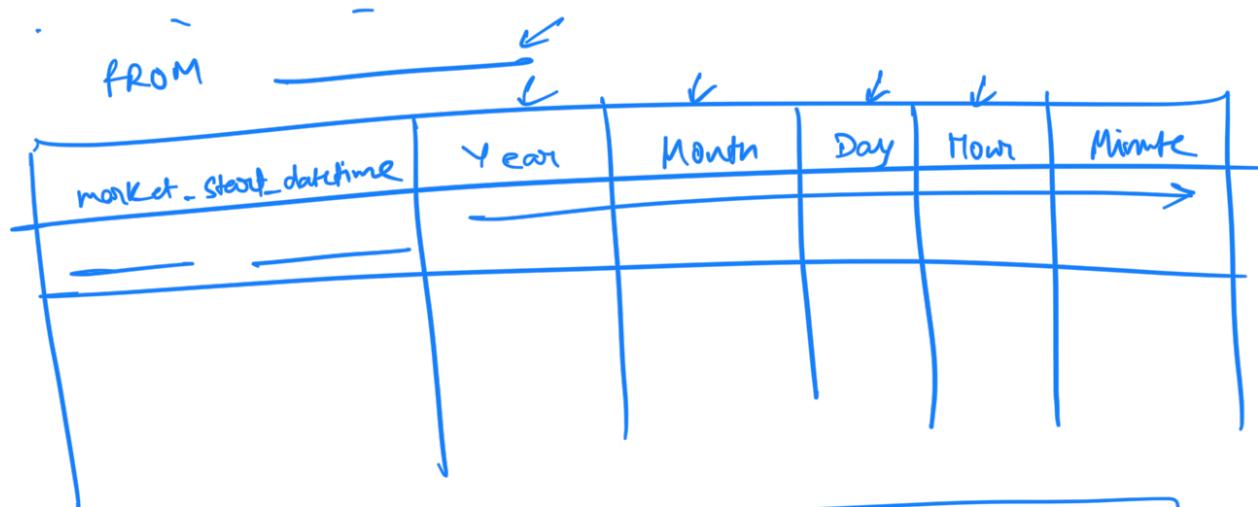


Q: For each market_date, extract the following
= 1. month

- day of ~
 - Month no of the year
 - Year
 - Hour
 - Minute

market_start_time (timestamp)

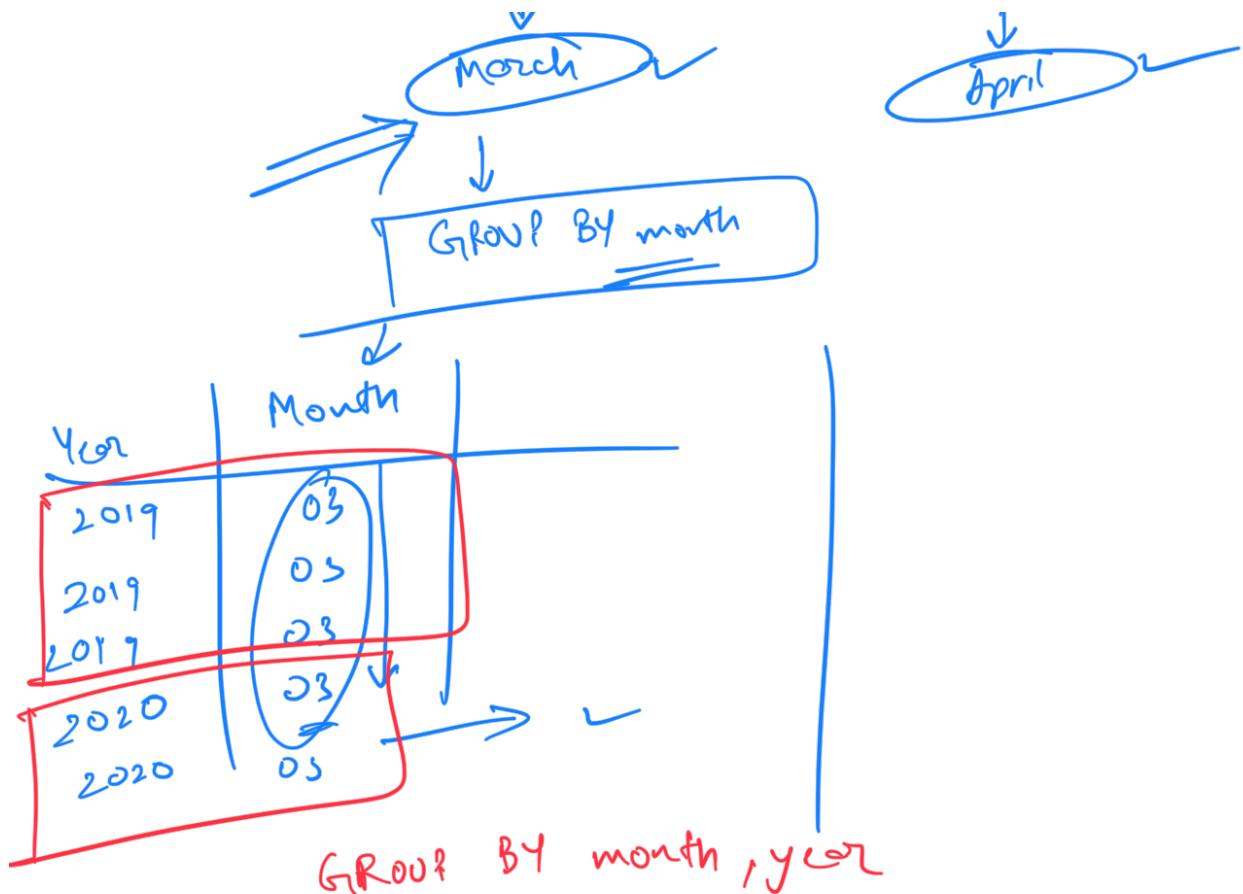
Syntax: SELECT —
→ EXTRALT (DAY FROM market_start_datetime) AS —



Month-over-month stats

The diagram illustrates a data flow process:

- Year** (at the top) flows into **Monthly avg. (March)**.
- Monthly avg. (March)** flows into **y**.
- y** is annotated with **GROUP BY month, year**.
- y** has three arrows pointing to specific dates: **2018-04**, **2019 - 04**, and **2020 - 04**.
- 2018-04**, **2019 - 04**, and **2020 - 04** are grouped under **April**.
- April** is grouped with **2019 - 03** and **2020 - 03**.
- 2019 - 03** and **2020 - 03** are grouped under **②**.
- ②** is grouped under **Year**.



Arithmetic on Datetime objects

Q: Sales within the first 30 mins of market_start.

ADD 30 mins. to my timestamp.

1 Day

2 Day

original Date or time

→

↓

market_startdatetime

what Interval to add

↓

30 mins

~ 1M

DATE_ADD (\downarrow) , INTERVAL $\frac{1 \text{ DAY}}{30 \text{ MINUTE}}$
 AS mkt_start_plus_30

2 Dates

DATEDIFF ($___$, $___$)

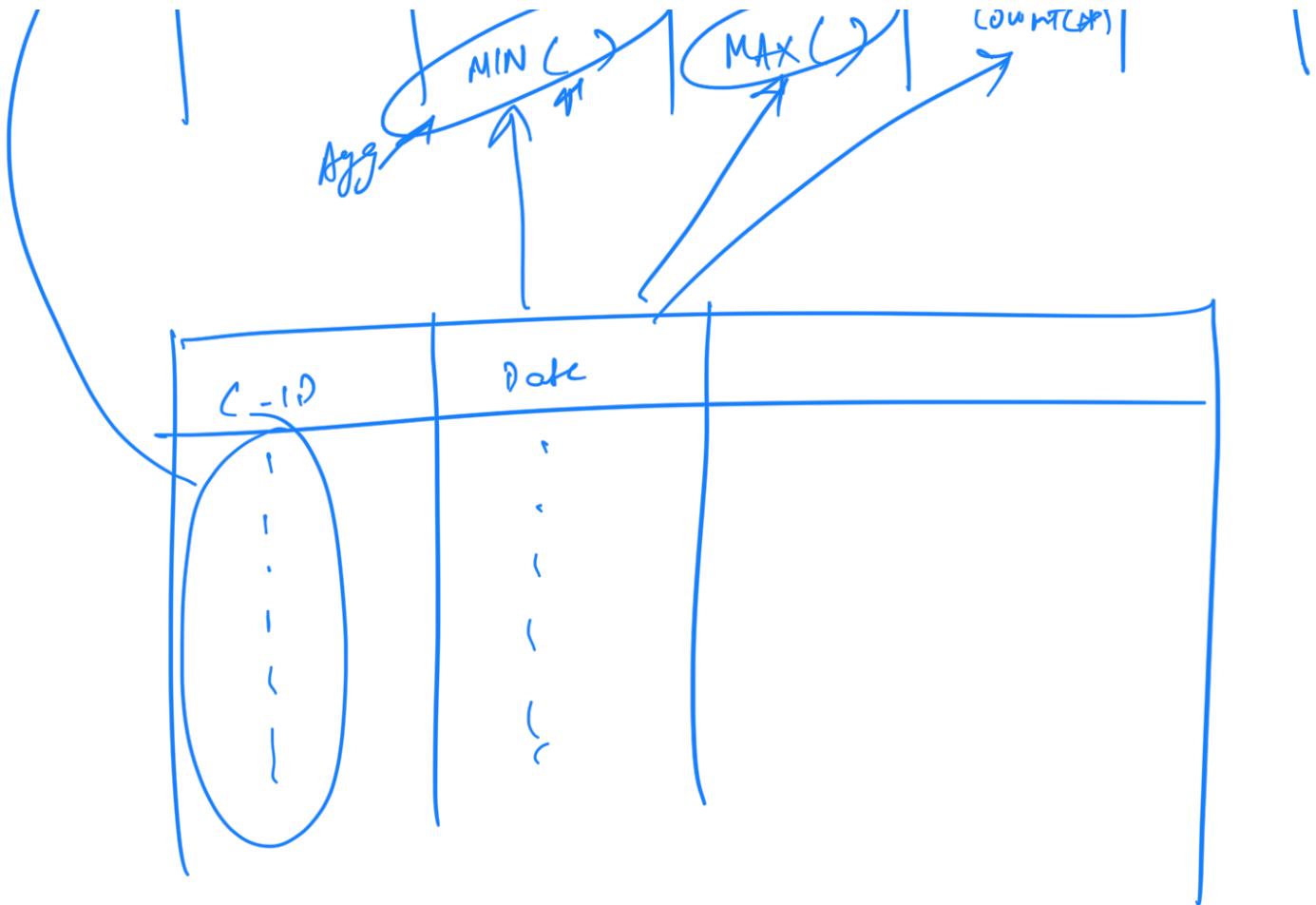
Q: How long was the farmer's market active?

Date
527 ✓

Q: How long a customer has been part of the farmer's market.

Number of purchases

CP	C-id	first date	last date	Num_purchases	Membership duration
1	—	—	—	—	—



BigQuery → DATE - DIFF()

DATE-DIFF (.MAX(____), MIN(____), Day)

Q: Write a query to find out the no' of days between 2 purchases for each customer.

LAG(____) → OVER(____)

r-ID	Date	Prev-date	No. of day
------	------	-----------	------------

1	21	NULL	6	DATEDIFF
1	22	21	6	
1	28	22		

↓

2
2
2
2

↓

Granular

①

GROUP BY month, year

②

GROUP BY month

③