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SQL Interview question # 1

✅ Twitter SQL Interview Question Solved!

🧠 Full Credits: **Nick Singh** 📕🐙 **DataLemur** 🐵 **(Ace the SQL & Data Interview)**

Question:

Assume you're given a table containing Twitter tweet data.

Write a SQL query to create a histogram of tweets posted per user in 2022.

🎯 **Output**:

Tweet Count per User (tweet_bucket)

Number of Users (number_of_users) who posted that many tweets

⚒️ **Create Table**:

```
CREATE TABLE tweets (
 tweet_id INT,
 user_id INT,
 msg TEXT,
 tweet_date DATETIME
);
```

🔄 **Insert Data**:

```
INSERT INTO tweets (tweet_id, user_id, msg, tweet_date) VALUES

(214252, 111, 'Am considering taking Tesla private at $420. Funding secured.', '2021-12-30 00:00:00'),

(739252, 111, 'Despite the constant negative press covfefe', '2022-01-01 00:00:00'),

(846402, 111, 'Following @NickSinghTech on Twitter changed my life!', '2022-02-14 00:00:00'),

(241425, 254, 'If the salary is so competitive why won't you tell me what it is?', '2022-03-01 00:00:00'),

(231574, 148, 'I no longer have a manager. I can''t be managed', '2022-03-23 00:00:00');
```

✅ Solution 1: Using Subquery

```
SELECT
 tweet_count_per_user AS tweet_bucket,
 COUNT(*) AS number_of_users
FROM (
 SELECT
 user_id,
 COUNT(*) AS tweet_count_per_user
 FROM tweets
 WHERE YEAR(tweet_date) = 2022
 GROUP BY user_id
) AS user_tweet_counts
GROUP BY tweet_count_per_user
ORDER BY tweet_bucket;
```

✅ Solution 2: Using CTE (Recommended)

```
WITH user_tweet_counts AS (
 SELECT
 user_id,
 COUNT(*) AS tweet_count
 FROM tweets
 WHERE YEAR(tweet_date) = 2022
 GROUP BY user_id
)
SELECT
 tweet_count,
 COUNT(*) AS num_users
FROM user_tweet_counts
GROUP BY tweet_count
ORDER BY tweet_count;
```
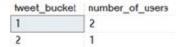
data

tweet_id	user_id	msg	tweet_date
214252	111	Am considering taking Tesla private at $420. Fundi...	2021-12-30 00:00:00.000
739252	111	Despite the constant negative press covfefe	2022-01-01 00:00:00.000
846402	111	Following @NickSinghTech on Twitter changed my ...	2022-02-14 00:00:00.000
241425	254	If the salary is so competitive why won't you tell me ...	2022-03-01 00:00:00.000
231574	148	I no longer have a manager. I can't be managed	2022-03-23 00:00:00.000

output

tweet_bucket	number_of_users
1	2
2	1