`messages` table

column	type
id	integer
date	date
user1	integer
user2	integer
msg_count	integer

We have a table that represents the total number of messages sent between two users by date on messenger.

1. What are **some insights** that could be derived from this table?
2. What do you think the **distribution of the number of conversations** created by each user per day looks like?
3. Write a query **to get the distribution of the number of conversations** created by each user by day in the year 2020.

Output:

column	type
num_conversations	integer
frequency	integer

Solution :

1. What are **some insights** that could be derived from this table?

    1. **Answer**

→ No of conversations between two users initiated per day

    ➔ No of messages sent per conversation
    ➔ Conversations started

Business metrics can be analyzed through time series problem

Year over Year analysis → no of conversations

Does number of conversations between two users indicate closer friendship?

Or Depth of conversations indicate closer friendship.

2. What do you think the distribution of the number of conversations created by each user per day looks like?

Depending on the values → if there are more big values then it is right skewed or bimodal

Analyze daily conversations

3. Given we just want to count the number of conversations, we can ignore the message count and focus on getting our key metric of number of new conversations created by day in a single query.

No of conversations → total distinct user2 group them by date and user1

Conversation: USER1 → USER2