**SQL for Creating Tables (All done via Python Code However)**

CREATE TABLE Tweets(

tweet\_ID BIGINT PRIMARY KEY NOT NULL UNIQUE,

tweet\_user\_ID BIGINT NOT NULL,

tweet\_contents TEXT,

tweet\_date\_time DATETIME,

tweet\_location TEXT,

tweet\_rt\_count INT,

tweet\_fav\_count INT,

tweet\_urls VARCHAR(255),

keywords VARCHAR(100) DEFAULT NULL,

source\_identifier INT DEFAULT 0);

CREATE TABLE Sources(

source\_ID BIGINT PRIMARY KEY NOT NULL UNIQUE,

source\_name VARCHAR(55));

CREATE TABLE Tweet\_User(

user\_ID BIGINT PRIMARY KEY NOT NULL UNIQUE,

user\_handle VARCHAR(25) NOT NULL UNIQUE,

user\_name VARCHAR(100),

user\_bio VARCHAR(255),

user\_location TEXT,

user\_join\_date DATETIME,

user\_fav\_count INT,

user\_follower\_count INT,

user\_following\_count INT,

twitter\_profile\_img\_url VARCHAR(255));

CREATE TABLE Tweet\_Mentions(

mention\_row\_ID INT PRIMARY KEY NOT NULL UNIQUE,

source\_tweet\_ID BIGINT,

source\_user\_ID BIGINT,

mentioned\_user VARCHAR(100));

Graphical user interface

Description automatically generated

**NOTE: Other Tables will be added but were not needed for this assignment.**

**7 Requested Queries**

1.

SELECT u.user\_name, u.user\_handle, t.tweet\_ID, t.tweet\_contents,u.user\_ID

FROM Tweets t

JOIN Tweet\_User u ON t.tweet\_user\_ID = u.user\_ID

WHERE t.tweet\_ID = sample\_tweet\_id;

2.

SELECT t.tweet\_date\_time, t.tweet\_ID, u.user\_name

FROM Tweets t

JOIN Tweet\_User u ON t.tweet\_user\_ID = u.user\_ID

WHERE t.tweet\_ID = sample\_tweet\_id;

3.

SELECT u.user\_name, t.tweet\_ID, t.tweet\_contents,t.tweet\_date\_time

FROM Tweets t

JOIN Tweet\_User u ON t.tweet\_user\_ID = u.user\_ID

WHERE (u.user\_ID = sample\_user\_id) AND (t.tweet\_date\_time > now() - interval 1 day);

4.

SELECT u.user\_name, COUNT(DISTINCT t.tweet\_ID)

FROM Tweets t

JOIN Tweet\_User u ON t.tweet\_user\_ID = u.user\_ID

WHERE (u.user\_ID = sample\_user\_id) AND (t.tweet\_date\_time > now() - interval 1 day)

GROUP BY u.user\_name;

5.

SELECT u.user\_name, u.user\_join\_date

FROM Tweet\_User u

WHERE u.user\_ID = sample\_user\_id;

6.

SELECT keywords, SUM(tweet\_rt\_count) as total\_rts, SUM(tweet\_fav\_count) as total\_favs

FROM Tweets

WHERE keywords != 'nan' # Equivalent to IS NOT NULL right now

GROUP BY keywords

ORDER BY total\_rts DESC, total\_favs DESC;

7.

SELECT tweet\_ID, tweet\_rt\_count, tweet\_fav\_count

FROM Tweets

ORDER BY tweet\_rt\_count DESC, tweet\_fav\_count DESC

LIMIT 25;