No	Operation
$\vdash$	Retrieve the id and creation time of each tweet
2	Retrieve the user id, followers count, and friends count for each tweet and order the results by user id
3	Retrieve the tweet id, user id for those tweets whose lang = "en"
4	Retrieve all the hashtags in the tweets and output the list of unique hashtags and their total frequency of occurrence in the tweets
2	Retrieve all the URLs posted by users in the tweets and output the list of unique URLs and their total frequency of occurrence in the tweets, order by the URL frequency (high to low)

No	Operation
9	Retrieve the start position of every hashtag in the tweets and output them in sorted order (ascending order)
7	Select tweets where isFavorited is false and only output the average of the followers count by grouping the tweets based on time zone
8	Select tweets where isRetweeted is false and the user is not verified, and only output the average of the friends count by grouping the tweets based on time zone
6	Create a table X by selecting tweets that are in the English language. Create a table Y by selecting tweets that are from verified users. Join the two tables X and Y by time zone and output the tweet ID in X and tweet ID in Y.
10	Create a table X by selecting hashtags from tweets where the user's time zone is US Pacific Time. Create a table Y by selecting from tweets where the user's time zone is US Eastern Time. Join X and Y by hashtag and output the entire join result with new attribute names 'hashtag1' and 'hashtag2'.

No	Operation
11	Create a DataFrame X by extracting a user's id, location, language, friends count, and followers count from all the tweets. Select the id and location of every record in X where language is not English and also output (along with id and location) the average friends and followers count computed over all records in X where language is not English.
12	Create a Dataset X by extracting a user's id, location, language, friends count, and followers count from all the tweets. Select the id and location of every record in X where the followers count is greater than 10.
13	Create a Dataset X by extracting a user's id, location, language, friends count, and followers count from all the tweets. Select the id and location of every record in X and also output (along with id and location) the max friends count computed over those records that are of the same language as the record being output.

S	Operation
14	Create a DataFrame X by extracting a user's id, location, language, friends count, and followers count from all the tweets. Create a DataFrame Y by extracting the id of every verified user from all the tweets. Select all records in X where the id does not exists in Y.
15	Create a Dataset X by extracting a user's id, location, and language from all the tweets. Create a Dataset Y by extracting the id and friends count of every non-verified user from all the tweets. Select all records in X if the id exists in Y and friends count is greater than 10.