

Table 1: Queries

| ID | Description |
|----|--|
| Q1 | <p>List $k=10$ most retweeted tweets in a given year = 2016; show the retweet count, the tweet text, the posting user's screen name, the posting user's category, the posting user's sub-category in descending order of the retweet count values</p> <p>Rationale: This query finds k most influential tweets in a given time frame and the users who posted them.</p> |
| Q2 | <p>Find $k=10$ hashtags that appeared in the most number of states in a given year = 2016; list the total number of states the hashtag appeared, the list of the distinct states it appeared, and the hashtag itself in descending order of the number of states the hashtag appeared.</p> <p>Rationale: This query finds k hashtags that are used across the most number of states, which could indicate a certain agenda (e.g., education, healthcare) that is widely discussed.</p> <p>Hint: Use group_concat() function to create a list</p> |
| Q3 | <p>Find all users used at least one hashtags from the list ["iowacaucus", "iacaucus"] in their tweets. Show the user's screen name and the state the user lives in descending order of the number of this user's followers.</p> <p>Rationale: This is to find users with similar interests.</p> |
| Q4 | <p>Find top $k=5$ most followed users in a given party. Show the user's screen name, the user's party, and the number of followers in descending order of the number of followers. Show your results with subcategory to be 'GOP' and 'Democrat' in separate queries.</p> <p>Rationale: This query finds the most influential users measured by the number of followers</p> |
| Q5 | <p>Find the list of distinct hashtags that appeared in tweets posted by users from Iowa in a given month = 1 of a given year = 2016; show the list of the hashtags and the number of tweets that used these hashtags.</p> <p>Rationale: This is to find interests among the users in the states of interest.</p> |
| Q6 | <p>Find all tweets (with the given hashtag = Iowa) posted by republican (GOP) or democrat members in a given month = 2 of a given year = 2016. Show the tweet text, the hashtag, the screen name of the posting user, and the users' party</p> <p>Rationale: This query explores the context in which the hashtag was used</p> |
| Q7 | <p>Find users in a given sub-category = 'GOP' along with the list of URLs used in the user's tweets in a given month = 1 of a given year = 2016. Show the user's screen name, the total number of tweets posted by this user, and the list of URLs, sorted by number of tweets the user posted in descending order.</p> |
| Q8 | <p>Find $k=10$ users who were mentioned the most in tweets. Show the mentioned user's screen name, number of followers, and the number of posting user(s) who mentioned this user, in descending order of the number of tweets mentioning this user.</p> |
| Q9 | <p>Find $k=10$ most used url with the count of tweets it appeared posted by a given sub-category = 'GOP' of users in a list of months = [1, 2, 3] of a given year = 2016. Show the hashtag name and the count in descending order of the count.</p> |