SQL AND RELATIONAL ALGEBRA OF USE CASES

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1. **Which twitter user has the most followers and followings?**

SELECT Name, max(Followers_count)
FROM TWITTER_USER
WHERE Following_count = (SELECT max(Following_count) FROM TWITTER_USER)

π **name, MAX (followers_count)**
 γ **MAX (followers_count)** twitter_user σ (π **MAX (following_count)**
 γ **MAX (following_count)** twitter_user)

2. **Which are the tweets related to Curry on Twitter ?**

SELECT Tweet_Text
FROM TWEETS_DETAILS
WHERE Tweet_Text LIKE '%Curry%'

π **Tweet_text**
 σ **Tweet_text LIKE '%Curry%''** tweets_details

3. **Which Twitter accounts tweeted about the CurryBrand and what were the other tags in the tweet?**

SELECT Twitter_Handle, Tags
FROM TWEETS_DETAILS AS td
INNER JOIN TWEET_TAGS AS tt ON td.TWEET_ID = tt.TWEET_ID
WHERE Tweet_Text LIKE '%CurryBrand%'

π **twitter_handle, tags**
 σ **tweet_text LIKE '%CurryBrand%'**
  (ρ **td** tweets_details $\bowtie$ **td . tweet_id = tt . tweet_id**
   ρ **tt** tweet_tags)

4. **Which twitter user got maximum followings and what is in their description?**

SELECT Twitter_Handle, User_Description, max(Following_count)
FROM TWITTER_USER

π **twitter_handle, user_description, MAX (following_count)**
 γ **MAX (following_count)** twitter_user

5. Which twitter users tweeted about Kyrie's apology?

SELECT Name
FROM TWITTER_USER AS tu
INNER JOIN TWEETS_DETAILS AS td On tu.Twitter_Handle = td.Twitter_Handle
WHERE td.Tweet_Text LIKE '%Kyrie%' OR td.Tweet_Text LIKE "%apologised%'

π **name**

σ **td . tweet_text LIKE '%Kyrie%' OR td . tweet_text LIKE '%apologised%'**

(ρ tu twitter_user $\bowtie$ tu . twitter_handle = td . twitter_handle

ρ td tweets_details)

1. **Which user account posted about the collaboration between LeBron James and Nike?**

SELECT tu.Twitter_Handle
FROM TWITTER_USER AS tu
INNER JOIN TWEETS_DETAILS AS td On tu.Twitter_Handle = td.Twitter_Handle
WHERE td.Tweet_Text LIKE '%LeBron James%' OR td.Tweet_Text LIKE '%Nike%'

π tu . twitter_handle

σ td . tweet_text LIKE '%LeBron James' OR td . tweet_text = '%Nike%'

 (ρ tu **twitter_user** $\bowtie$ tu . twitter_handle = td . twitter_handle

  ρ td **tweets_details)**

2. **Which user/users tweeted about Jimmy's Triple-Double shot?**

SELECT *
FROM TWEETS_DETAILS
WHERE Tweet_Text LIKE '%Jimmy%' OR Tweet_Text LIKE '%triple-double%';

σ Tweet_Text LIKE '%Jimmy%' OR Tweet_Text LIKE '%triple-double%' **tweets_details**

3. **Which Twitter user has the most followers and least following?**

SELECT Twitter_Handle, max(Followers_count), min(Following_count)
FROM TWITTER_USER

π twitter_handle, MAX (followers_count), MIN (following_count)

 γ MAX (followers_count), MIN (following_count) **twitter_user**

4. **Which twitter users have tweeted related to the NBA, give their description?**

SELECT tu.Twitter_Handle, tu.User_Description
FROM TWITTER_USER AS tu
INNER JOIN TWEETS_DETAILS AS td On tu.Twitter_Handle = td.Twitter_Handle
WHERE td.Tweet_Text LIKE '%NBA%'

π tu . twitter_handle, tu . user_description

 σ td . tweet_text LIKE '%NBA%'

 (ρ tu **twitter_user** $\bowtie$ tu . twitter_handle = td . twitter_handle

  ρ td **tweets_details)**

5. **How many twitter users have basketball Or NBA in their description?**

SELECT Count(*)
FROM TWITTER_USER
WHERE User_Description LIKE '%NBA%' OR User_Description LIKE '%basketball%'

π COUNT (*)
 γ COUNT (*)
  σ user_description LIKE 'NBA' OR user_description LIKE '%basketball" **twitter_user**