## Queries

val sqlContext = new org.apache.spark.sql.SQLContext(sc);

import sqlContext.implicits.\_

val tweetstable = sqlContext.read.json("/project/dataset.json");

tweetstable.registerTempTable("tweetDatatable");

val q1 = sqlContext.sql("SELECT place.country,count(\*) AS count FROM tweetDatatable GROUP BY place.country ORDER BY count DESC limit 10");

q1.show();

q1.coalesce(1).write.format("com.databricks.spark.csv").save("/project/csv/q1.csv");

val q2=sqlContext.sql("SELECT substring(user.created\_at,1,3) as day,count(\*) as count from tweetDatatable group by day");

val q3=sqlContext.sql("SELECT count(\*) as count, user.name from tweetDatatable where user.name is not null group by user.name order by count desc limit 10");

val q4 = sqlContext.sql("SELECT substring(user.created\_at,5,3) as month, count(user.id)
from tweetDatatable group by month");

val q5 = sqlContext.sql("SELECT user.name, max(user.followers\_count) as followers\_count, user.lang FROM tweetDatatable WHERE text like '%football%' group by user.name,user.lang order by followers\_count desc limit 15");

val q6=sqlContext.sql("select count(\*) as count,q.text from (select case when text like '%fcb%' then 'fc barcelona' when text like '%real madrid%' then 'real madrid' when text like '%fifa%' then 'fifa' when text like '%premier league%' then 'premier league' when text like '%la liga%' then 'la liga' when text like '%arsenal%' then 'arsenal' when text like '%chelsea%' then 'chelsea fc' WHEN text like '%manchester%' THEN 'manchester' WHEN text like '%tottenham%' THEN 'tottenham' WHEN text like '%psg%' THEN 'psg' else 'different sports' end as text from tweetDatatable)q group by q.text");

val q7 = sqlContext.sql("SELECT

user.verified,user.screen\_name,max(user.followers\_count) as followers\_count FROM tweetDatatable WHERE user.verified = false GROUP BY user.verified, user.screen\_name ORDER BY followers\_count DESC LIMIT 15");

val q8 = sqlContext.sql("SELECT

user.screen\_name,text,retweeted\_status.retweet\_count FROM tweetDatatable ORDER BY retweeted status.retweet count DESC LIMIT 20");

val q9=sqlContext.sql("SELECT user.location,count(text) as count FROM tweetDatatable WHERE place.country='United States' AND user.location is not null GROUP BY user.location ORDER BY count DESC LIMIT 15");

val q10 = sqlContext.sql("SELECT user.name ,retweeted\_status.text AS
Retweet\_Text,retweeted\_status.retweet\_count AS Retweet\_Count FROM
tweetDatatable WHERE retweeted\_status.retweet\_count IS NOT NULL ORDER BY
retweeted\_status.retweet\_count DESC limit 10");

val q11=sqlContext.sql("SELECT substring(quoted\_status.created\_at,1,3) as day,count(text) as count FROM tweetDatatable GROUP BY day");

val q12 = sqlContext.sql("SELECT substring(user.created\_at,27,4) as year,count(\*) as Count from tweetDatatable where user.created\_at is not null group by substring(user.created\_at,27,4) order by count(1) desc");

val q13 = sqlContext.sql("SELECT user.name as UserName,user.location as loc,text,created\_at," + "CASE WHEN text like '%fcb%' THEN 'fc barcelona'" + "WHEN text like '%real madrid%' THEN 'real madrid'" + "WHEN text like '%fifa%' THEN 'fifa'" + "WHEN text like '%premier league%' THEN 'premier league'" + "WHEN text LIKE '%la liga%' THEN 'la liga'" + "WHEN text like '%arsenal%' THEN 'arsenal'" +"WHEN text like '%chelsea%' THEN 'chelsea fc'" +"WHEN text like '%manchester%' THEN 'manchester'" +"WHEN text like '%tottenham%' THEN 'tottenham'" +"WHEN text like '%psg%' THEN 'psg'" +"END AS leagueType from tweetDatatable where text is not null");

q13.createOrReplaceTempView("leaguetable");

val r1 = sqlContext.sql("SELECT UserName,leagueType,count(\*) as count
FROM leaguetable WHERE leagueType='fc barcelona' " + "group by UserName,

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leagueType order by count desc limit 1");
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val r2 = sqlContext.sql("SELECT UserName, leagueType,count(\*) as count
FROM leaguetable WHERE leagueType='real madrid' " + "group by UserName,
leagueType order by count desc limit 1");

val r3 = sqlContext.sql("SELECT UserName, leagueType,count(\*) as count
FROM leaguetable WHERE leagueType='fifa' " + "group by UserName,
leagueType order by count desc limit 1");

val r4 = sqlContext.sql("SELECT UserName, leagueType,count(\*) as count
FROM leaguetable WHERE leagueType='premier league' " + "group by UserName,
leagueType order by count desc limit 1");

val r5 = sqlContext.sql("SELECT UserName, leagueType,count(\*) as count FROM leaguetable WHERE leagueType='la liga' " + "group by UserName, leagueType order by count desc limit 1");

val r6 = sqlContext.sql("SELECT UserName, leagueType,count(\*) as count
FROM leaguetable WHERE leagueType='arsenal' " + "group by UserName,
leagueType order by count desc limit 1");

val r7 = sqlContext.sql("SELECT UserName, leagueType,count(\*) as count
FROM leaguetable WHERE leagueType='chelsea' " + "group by UserName,
leagueType order by count desc limit 1");

val r8 = sqlContext.sql("SELECT UserName, leagueType,count(\*) as count
FROM leaguetable WHERE leagueType='manchester' " + "group by UserName,
leagueType order by count desc limit 1");

val r9 = sqlContext.sql("SELECT UserName, leagueType,count(\*) as count
FROM leaguetable WHERE leagueType='tottenham' " + "group by UserName,
leagueType order by count desc limit 1");

val r10 = sqlContext.sql("SELECT UserName, leagueType,count(\*) as count
FROM leaguetable WHERE leagueType='psg' " + "group by UserName,
leagueType order by count desc limit 1");

val query = r1.union(r2).union(r3).union(r4).union(r5).union(r6)
.union(r7).union(r8).union(r9).union(r10);