-- Calculate the fav counts for tweets within a given timeframe

with vars as (

SELECT TIMESTAMP("{START\_TIME}") AS start\_date,

TIMESTAMP("{END\_TIME}") AS end\_date

),

favs\_unioned AS (

SELECT

userIdentifier.userId AS userId,

item.tweetInfo.actionTweetId AS tweetId,

eventMetadata.sourceTimestampMs AS tsMillis,

CASE

WHEN actionType = "ServerTweetFav" THEN 1

WHEN actionType = "ServerTweetUnfav" THEN -1

END AS favOrUnfav

FROM `twttr-bql-unified-prod.unified\_user\_actions\_engagements.streaming\_unified\_user\_actions\_engagements`, vars

WHERE (DATE(dateHour) >= DATE(vars.start\_date) AND DATE(dateHour) <= DATE(vars.end\_date))

AND eventMetadata.sourceTimestampMs >= UNIX\_MILLIS(vars.start\_date)

AND eventMetadata.sourceTimestampMs <= UNIX\_MILLIS(vars.end\_date)

AND userIdentifier.userId IS NOT NULL

AND (actionType = "ServerTweetFav" OR actionType = "ServerTweetUnfav")

),

user\_tweet\_fav\_pairs AS (

SELECT userId, tweetId, ARRAY\_AGG(STRUCT(favOrUnfav, tsMillis) ORDER BY tsMillis DESC LIMIT 1) as details, count(\*) as cnt

FROM favs\_unioned

GROUP BY userId, tweetId

),

tweet\_raw\_favs\_table AS (

SELECT userId, tweetId, CAST(dt.tsMillis AS FLOAT64) AS tsMillis

FROM user\_tweet\_fav\_pairs CROSS JOIN UNNEST(details) as dt

WHERE cnt < 3 AND dt.favOrUnfav = 1

)

SELECT tweetId, COUNT(DISTINCT(userId)) AS favCount

FROM tweet\_raw\_favs\_table

GROUP BY tweetId