

Code in BigQuery to create a target table:

SELECT

```
TRI.usertype,
ZIPSTART.zip_code AS zip_code_start,
ZIPSTARTNAME.borough borough_start,
ZIPSTARTNAME.neighborhood AS neighborhood_start,
ZIPEND.zip_code AS zip_code_end,
ZIPENDNAME.borough borough_end,
ZIPENDNAME.neighborhood AS neighborhood_end,
DATE_ADD(DATE(TRI.starttime), INTERVAL 5 YEAR) AS start_day,
DATE_ADD(DATE(TRI.stoptime), INTERVAL 5 YEAR) AS stop_day,
WEA.temp AS day_mean_temperature, -- Mean temp
WEA.wdsp AS day_mean_wind_speed, -- Mean wind speed
WEA.prcp day_total_precipitation, -- Total precipitation
-- Group trips into 10 minute intervals to reduces the number of rows
ROUND(CAST(TRI.tripduration / 60 AS INT64), -1) AS trip_minutes,
COUNT(TRI.bikeid) AS trip_count
FROM
`bigquery-public-data.new_york_citibike.citibike_trips` AS TRI
INNER JOIN
`bigquery-public-data.geo_us_boundaries.zip_codes` ZIPSTART
ON ST_WITHIN(
ST_GEOGPOINT(TRI.start_station_longitude, TRI.start_station_latitude),
ZIPSTART.zip_code_geom)
INNER JOIN
`bigquery-public-data.geo_us_boundaries.zip_codes` ZIPEND
ON ST_WITHIN(
ST_GEOGPOINT(TRI.end_station_longitude, TRI.end_station_latitude),
ZIPEND.zip_code_geom)
INNER JOIN
`bigquery-public-data.noaa_gsod.gsod20*` AS WEA
ON PARSE_DATE("%Y%m%d", CONCAT(WEA.year, WEA.mo, WEA.da)) = DATE(TRI.starttime)
INNER JOIN
-- Note! Add your zip code table name, enclosed in backticks: `example_table`
`example_table zipcodes` AS ZIPSTARTNAME
ON ZIPSTART.zip_code = CAST(ZIPSTARTNAME.zip AS STRING)
INNER JOIN
-- Note! Add your zipcode table name, enclosed in backticks: `example_table`
`example_table zipcodes` AS ZIPENDNAME
ON ZIPEND.zip_code = CAST(ZIPENDNAME.zip AS STRING)
WHERE
-- This takes the weather data from one weather station
WEA.wban = '94728' -- NEW YORK CENTRAL PARK
-- Use data from 2014 and 2015
```

```
AND EXTRACT(YEAR FROM DATE(TRI.starttime)) BETWEEN 2014 AND 2015
GROUP BY
1,
2,
3,
4,
5,
6,
7,
8,
9,
10,
11,
12,
13
```