1--I need total Population in zipcode 94085 (Sunnyvale CA)

SELECT

zip\_code,

population,

SUM(population) OVER () AS total\_population

FROM `bigquery-public-data.census\_bureau\_usa.population\_by\_zip\_2010`

WHERE zip\_code = '94085';

2--I need number of Male and Female head count in zipcode 94085 (Sunnyvale CA)

SELECT

zip\_code,

gender,

population,

SUM(CASE WHEN gender = 'Male' THEN population ELSE 0 END)

OVER () AS male\_population,

SUM(CASE WHEN gender = 'Female' THEN population ELSE 0 END)

OVER () AS female\_population

FROM `bigquery-public-data.census\_bureau\_usa.population\_by\_zip\_2010`

WHERE zip\_code = '94085';

3--I want which Age group has max headcount for both male and female genders combine (zipcode 94085 (Sunnyvale CA))

SELECT

zip\_code,

CONCAT(CAST(minimum\_age AS STRING), '-', CAST(maximum\_age AS STRING)) AS age\_group,

population,

SUM(population) OVER (PARTITION BY CONCAT(CAST(minimum\_age AS STRING), '-', CAST(maximum\_age AS STRING)))

AS total\_population

FROM `bigquery-public-data.census\_bureau\_usa.population\_by\_zip\_2010`

WHERE zip\_code = '94085'

ORDER BY total\_population DESC;

4--I want age group for male gender which has max male population zipcode 94085 (Sunnyvale CA))

WITH MalePopulation AS (

SELECT

zip\_code,

CONCAT(CAST(minimum\_age AS STRING), '-', CAST(maximum\_age AS STRING)) AS age\_group,

population,

SUM(population) OVER (PARTITION BY CONCAT(CAST(minimum\_age AS STRING), '-', CAST(maximum\_age AS STRING))) AS total\_male\_population

FROM `bigquery-public-data.census\_bureau\_usa.population\_by\_zip\_2010`

WHERE

zip\_code = '94085'

AND LOWER(gender) = 'male' -- Case-insensitive gender filtering

AND minimum\_age IS NOT NULL

AND maximum\_age IS NOT NULL

)

SELECT

zip\_code,

age\_group,

total\_male\_population

FROM MalePopulation

QUALIFY RANK() OVER (ORDER BY total\_male\_population DESC) = 1;

5--I want age group for female gender which has max male population zipcode 94085 (Sunnyvale CA))

WITH FemalePopulation AS (

SELECT

zip\_code,

CONCAT(CAST(minimum\_age AS STRING), '-', CAST(maximum\_age AS STRING)) AS age\_group,

population,

SUM(population) OVER (PARTITION BY CONCAT(CAST(minimum\_age AS STRING), '-', CAST(maximum\_age AS STRING))) AS total\_female\_population

FROM `bigquery-public-data.census\_bureau\_usa.population\_by\_zip\_2010`

WHERE

zip\_code = '94085'

AND LOWER(gender) = 'female' -- Case-insensitive gender filtering

AND minimum\_age IS NOT NULL

AND maximum\_age IS NOT NULL

)

SELECT

zip\_code,

age\_group,

total\_female\_population

FROM FemalePopulation

QUALIFY RANK() OVER (ORDER BY total\_female\_population DESC) = 1;

6--I want zipcode which has highest male and female population in USA

SELECT

zipcode,

SUM(CASE WHEN LOWER(gender) = 'male' THEN population ELSE 0 END)

OVER (PARTITION BY zipcode) AS male\_population,

SUM(CASE WHEN LOWER(gender) = 'female' THEN population ELSE 0 END)

OVER (PARTITION BY zipcode) AS female\_population,

SUM(population) OVER (PARTITION BY zipcode) AS total\_population

FROM `bigquery-public-data.census\_bureau\_usa.population\_by\_zip\_2010`

QUALIFY RANK() OVER (ORDER BY SUM(population) OVER (PARTITION BY zipcode) DESC) > 0;

7--I want first five age groups which has highest male and female population in USA

SELECT

CONCAT(CAST(minimum\_age AS STRING), '-', CAST(maximum\_age AS STRING)) AS age\_group,

SUM(CASE WHEN LOWER(gender) = 'male' THEN population ELSE 0 END)

OVER (PARTITION BY CONCAT(CAST(minimum\_age AS STRING), '-', CAST(maximum\_age AS STRING))) AS male\_population,

SUM(CASE WHEN LOWER(gender) = 'female' THEN population ELSE 0 END)

OVER (PARTITION BY CONCAT(CAST(minimum\_age AS STRING), '-', CAST(maximum\_age AS STRING))) AS female\_population

FROM `bigquery-public-data.census\_bureau\_usa.population\_by\_zip\_2010`

QUALIFY RANK() OVER (ORDER BY male\_population DESC) <= 5

OR RANK() OVER (ORDER BY female\_population DESC) <= 5;

8--I want first five zipcodes which has highest female population in entire USA

SELECT

zipcode,

SUM(CASE WHEN LOWER(gender) = 'female' THEN population ELSE 0 END)

OVER (PARTITION BY zipcode) AS female\_population

FROM `bigquery-public-data.census\_bureau\_usa.population\_by\_zip\_2010`

QUALIFY RANK() OVER (ORDER BY female\_population DESC) <= 5;

9--I want first 10 which has lowest male population in entire USA

SELECT

zipcode,

SUM(CASE WHEN LOWER(gender) = 'male' THEN population ELSE 0 END)

OVER (PARTITION BY zipcode) AS male\_population

FROM `bigquery-public-data.census\_bureau\_usa.population\_by\_zip\_2010`

QUALIFY RANK() OVER (ORDER BY male\_population ASC) <= 10;