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

**Table = `bigquery-public-data.census\_bureau\_usa.population\_by\_zip\_2010`**

SELECT

DISTINCT zipcode,

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

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

WHERE zipcode = '94085';

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

SELECT distinct

SUM(CASE WHEN GENDER = 'female' THEN population ELSE 0 END) OVER (PARTITION BY zipcode) AS female\_population,

SUM(CASE WHEN 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`

WHERE zipcode = '94085';

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**Table = `bigquery-public-data.census\_bureau\_usa.population\_by\_zip\_2010`**

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

WITH AgeGroupPopulation AS (

SELECT

CASE

WHEN minimum\_age >= 0 AND maximum\_age < 10 THEN '0-10'

WHEN minimum\_age >= 10 AND maximum\_age < 20 THEN '10-20'

WHEN minimum\_age >= 20 AND maximum\_age < 30 THEN '20-30'

WHEN minimum\_age >= 30 AND maximum\_age < 40 THEN '30-40'

WHEN minimum\_age >= 40 AND maximum\_age < 50 THEN '40-50'

WHEN minimum\_age >= 50 AND maximum\_age < 60 THEN '50-60'

WHEN minimum\_age >= 60 AND maximum\_age < 70 THEN '60-70'

WHEN minimum\_age >= 70 AND maximum\_age < 80 THEN '70-80'

WHEN minimum\_age >= 80 AND maximum\_age < 90 THEN '80-90'

ELSE '90+'

END AS age\_group,

population

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

WHERE zipcode = '94085'

),

RankedPopulation AS (

SELECT age\_group,

SUM(population) AS total\_population,

RANK() OVER (ORDER BY SUM(population) DESC) AS rank

FROM AgeGroupPopulation

GROUP BY age\_group

)

SELECT age\_group, total\_population, rank

FROM RankedPopulation

WHERE rank = 1;

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**Table = `bigquery-public-data.census\_bureau\_usa.population\_by\_zip\_2010`**

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

WITH age\_population AS (

SELECT

CASE

WHEN minimum\_age >= 0 AND maximum\_age < 10 THEN '0-10'

WHEN minimum\_age >= 10 AND maximum\_age < 20 THEN '10-20'

WHEN minimum\_age >= 20 AND maximum\_age < 30 THEN '20-30'

WHEN minimum\_age >= 30 AND maximum\_age < 40 THEN '30-40'

WHEN minimum\_age >= 40 AND maximum\_age < 50 THEN '40-50'

WHEN minimum\_age >= 50 AND maximum\_age < 60 THEN '50-60'

WHEN minimum\_age >= 60 AND maximum\_age < 70 THEN '60-70'

WHEN minimum\_age >= 70 AND maximum\_age < 80 THEN '70-80'

WHEN minimum\_age >= 80 AND maximum\_age < 90 THEN '80-90'

ELSE '90+'

END AS age\_group,

population,

SUM(POPULATION) OVER (PARTITION BY

CASE

WHEN minimum\_age >= 0 AND maximum\_age < 10 THEN '0-10'

WHEN minimum\_age >= 10 AND maximum\_age < 20 THEN '10-20'

WHEN minimum\_age >= 20 AND maximum\_age < 30 THEN '20-30'

WHEN minimum\_age >= 30 AND maximum\_age < 40 THEN '30-40'

WHEN minimum\_age >= 40 AND maximum\_age < 50 THEN '40-50'

WHEN minimum\_age >= 50 AND maximum\_age < 60 THEN '50-60'

WHEN minimum\_age >= 60 AND maximum\_age < 70 THEN '60-70'

WHEN minimum\_age >= 70 AND maximum\_age < 80 THEN '70-80'

WHEN minimum\_age >= 80 AND maximum\_age < 90 THEN '80-90'

ELSE '90+'

END

) AS Male\_Population

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

WHERE zipcode = '94085' AND GENDER = 'male'

),

RankedPopulation AS (

SELECT DISTINCT

age\_group,

Male\_Population,

RANK() OVER (ORDER BY Male\_Population DESC) AS rank

FROM age\_population

)

SELECT age\_group, Male\_Population

FROM RankedPopulation

WHERE rank = 1;

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

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

**Table = `bigquery-public-data.census\_bureau\_usa.population\_by\_zip\_2010`**

WITH age\_population AS (

SELECT

CASE

WHEN minimum\_age >= 0 AND maximum\_age < 10 THEN '0-10'

WHEN minimum\_age >= 10 AND maximum\_age < 20 THEN '10-20'

WHEN minimum\_age >= 20 AND maximum\_age < 30 THEN '20-30'

WHEN minimum\_age >= 30 AND maximum\_age < 40 THEN '30-40'

WHEN minimum\_age >= 40 AND maximum\_age < 50 THEN '40-50'

WHEN minimum\_age >= 50 AND maximum\_age < 60 THEN '50-60'

WHEN minimum\_age >= 60 AND maximum\_age < 70 THEN '60-70'

WHEN minimum\_age >= 70 AND maximum\_age < 80 THEN '70-80'

WHEN minimum\_age >= 80 AND maximum\_age < 90 THEN '80-90'

ELSE '90+'

END AS age\_group,

population,

SUM(POPULATION) OVER (PARTITION BY

CASE

WHEN minimum\_age >= 0 AND maximum\_age < 10 THEN '0-10'

WHEN minimum\_age >= 10 AND maximum\_age < 20 THEN '10-20'

WHEN minimum\_age >= 20 AND maximum\_age < 30 THEN '20-30'

WHEN minimum\_age >= 30 AND maximum\_age < 40 THEN '30-40'

WHEN minimum\_age >= 40 AND maximum\_age < 50 THEN '40-50'

WHEN minimum\_age >= 50 AND maximum\_age < 60 THEN '50-60'

WHEN minimum\_age >= 60 AND maximum\_age < 70 THEN '60-70'

WHEN minimum\_age >= 70 AND maximum\_age < 80 THEN '70-80'

WHEN minimum\_age >= 80 AND maximum\_age < 90 THEN '80-90'

ELSE '90+'

END

) AS female\_Population

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

WHERE zipcode = '94085' AND GENDER = 'female'

),

RankedPopulation AS (

SELECT DISTINCT

age\_group,

female\_Population,

RANK() OVER (ORDER BY female\_Population DESC) AS rank

FROM age\_population

)

SELECT age\_group, female\_Population

FROM RankedPopulation

WHERE rank = 1;

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

**Table = `bigquery-public-data.census\_bureau\_usa.population\_by\_zip\_2010`**

WITH population\_data AS (

SELECT

zipcode,

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

OVER (PARTITION BY zipcode) AS female\_population,

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

OVER (PARTITION BY zipcode) AS male\_population,

SUM(CASE WHEN GENDER IN ('male', 'female') THEN population ELSE 0 END)

OVER (PARTITION BY zipcode) AS total\_population

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

WHERE GENDER IN ('male', 'female')

)

, ranked\_population AS (

SELECT

zipcode,

female\_population,

male\_population,

total\_population,

ROW\_NUMBER() OVER (ORDER BY total\_population DESC) AS population\_rank

FROM population\_data

)

SELECT zipcode, female\_population, male\_population, total\_population

FROM ranked\_population

WHERE population\_rank = 1;

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

WITH age\_group\_population AS (

SELECT

CASE

WHEN minimum\_age >= 0 AND maximum\_age < 10 THEN '0-10'

WHEN minimum\_age >= 10 AND maximum\_age < 20 THEN '10-20'

WHEN minimum\_age >= 20 AND maximum\_age < 30 THEN '20-30'

WHEN minimum\_age >= 30 AND maximum\_age < 40 THEN '30-40'

WHEN minimum\_age >= 40 AND maximum\_age < 50 THEN '40-50'

WHEN minimum\_age >= 50 AND maximum\_age < 60 THEN '50-60'

WHEN minimum\_age >= 60 AND maximum\_age < 70 THEN '60-70'

WHEN minimum\_age >= 70 AND maximum\_age < 80 THEN '70-80'

WHEN minimum\_age >= 80 AND maximum\_age < 90 THEN '80-90'

ELSE '90+'

END AS age\_group,

SUM(CASE WHEN gender = 'male' THEN population ELSE 0 END) AS male\_population,

SUM(CASE WHEN gender = 'female' THEN population ELSE 0 END) AS female\_population

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

GROUP BY age\_group

)

, ranked\_age\_groups AS (

SELECT

age\_group,

male\_population,

female\_population,

RANK() OVER (ORDER BY male\_population DESC) AS male\_population\_rank,

RANK() OVER (ORDER BY female\_population DESC) AS female\_population\_rank

FROM age\_group\_population

)

SELECT

age\_group,

male\_population,

female\_population

FROM ranked\_age\_groups

WHERE male\_population\_rank <= 5 OR female\_population\_rank <= 5

ORDER BY male\_population\_rank, female\_population\_rank;

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

**Table = `bigquery-public-data.census\_bureau\_usa.population\_by\_zip\_2010`**

WITH population\_data AS (

SELECT

zipcode,

SUM(CASE WHEN gender = 'female' THEN population ELSE 0 END) AS female\_population

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

GROUP BY zipcode

)

, ranked\_zipcodes AS (

SELECT

zipcode,

female\_population,

ROW\_NUMBER() OVER (ORDER BY female\_population DESC) AS row\_num

FROM population\_data

)

SELECT

zipcode,

female\_population

FROM ranked\_zipcodes

WHERE row\_num <= 5;

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

**Table = `bigquery-public-data.census\_bureau\_usa.population\_by\_zip\_2010`**

WITH population\_data AS (

SELECT

zipcode,

SUM(CASE WHEN gender = 'male' THEN population ELSE 0 END) AS male\_population

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

GROUP BY zipcode

)

, ranked\_zipcodes AS (

SELECT

zipcode,

male\_population,

ROW\_NUMBER() OVER (ORDER BY male\_population ASC) AS rank

FROM population\_data

)

SELECT

zipcode,

male\_population

FROM ranked\_zipcodes

WHERE rank <= 10;

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