--Join Q4 data and June(5a,b) into one table

select \*

from `kelechis-first-project.bike\_data.Bike share 01`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 02`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 03`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 04`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 05a`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 05b`;

--Use unioned table in CTE to calculate total no. of casual users/ members

--count of casual/members

WITH new\_bike

AS (

select \*

from `kelechis-first-project.bike\_data.Bike share 01`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 02`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 03`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 04`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 05a`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 05b`

)

select member\_casual, count(member\_casual)

from new\_bike

where member\_casual is not null

group by member\_casual

order by member\_casual desc;

--Calculate Average and Max Ride length(in seconds) grouped by user type

WITH new\_bike

AS (

select \*

from `kelechis-first-project.bike\_data.Bike share 01`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 02`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 03`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 04`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 05a`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 05b`

)

select

   member\_casual,

   avg((EXTRACT(HOUR FROM ride\_length) \* 3600) + (EXTRACT(MINUTE FROM ride\_length) \* 60) + EXTRACT(SECOND FROM ride\_length)) AS average\_ridelength\_seconds,

   max((EXTRACT(HOUR FROM ride\_length) \* 3600) + (EXTRACT(MINUTE FROM ride\_length) \* 60) + EXTRACT(SECOND FROM ride\_length)) as max\_ridelength\_seconds -- converts ride\_length from HH:MM:SS to seconds and calculates average and max ride\_length

from new\_bike

where member\_casual is not null

group by member\_casual

order by average\_ridelength\_seconds desc;

--Count of users and average\_ridelength by day of the week and user type

WITH new\_bike

AS (

select \*

from `kelechis-first-project.bike\_data.Bike share 01`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 02`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 03`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 04`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 05a`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 05b`

)

select week\_day,member\_casual, count(member\_casual) as user\_count, avg((EXTRACT(HOUR FROM ride\_length) \* 3600) + (EXTRACT(MINUTE FROM ride\_length) \* 60) + EXTRACT(SECOND FROM ride\_length)) AS average\_ridelength\_seconds

from new\_bike

where member\_casual is not null

group by week\_day, member\_casual

order by user\_count desc;

--user and bike type vs biketype\_count

WITH new\_bike

AS (

select \*

from `kelechis-first-project.bike\_data.Bike share 01`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 02`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 03`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 04`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 05a`

union all

select \*

from `kelechis-first-project.bike\_data.Bike share 05b`

)

select member\_casual, bike\_type, count(bike\_type) as biketype\_count

from new\_bike

where member\_casual is not null

group by member\_casual,bike\_type

order by biketype\_count desc;

--percentage of biketype\_count per user type(casual/member)

WITH new\_bike AS (

  SELECT \*

  FROM `kelechis-first-project.bike\_data.Bike share 01`

  UNION ALL

  SELECT \*

  FROM `kelechis-first-project.bike\_data.Bike share 02`

  UNION ALL

  SELECT \*

  FROM `kelechis-first-project.bike\_data.Bike share 03`

  UNION ALL

  SELECT \*

  FROM `kelechis-first-project.bike\_data.Bike share 04`

  UNION ALL

  SELECT \*

  FROM `kelechis-first-project.bike\_data.Bike share 05a`

  UNION ALL

  SELECT \*

  FROM `kelechis-first-project.bike\_data.Bike share 05b`

)

--below query is a subquery that selects the 'biketype\_count' derived from the main query

SELECT

  member\_casual,

  bike\_type,

  biketype\_count,

  (biketype\_count / SUM(biketype\_count) OVER (PARTITION BY member\_casual)) \* 100 AS percentage\_of\_biketype\_count --calculate percentage per user type (casual/member)

FROM (

  SELECT

    member\_casual,

    bike\_type,

    COUNT(bike\_type) AS biketype\_count

  FROM new\_bike

  WHERE member\_casual IS NOT NULL

  GROUP BY member\_casual, bike\_type

)

ORDER BY member\_casual, biketype\_count DESC;