-- preview of data
```
SELECT *
FROM processed_cyclistic
LIMIT 5;
```

ride_id	rideable_type	started_at	ended_at	member_casual	ride_length	day_of_week
8FE8F7D9C10E88C7	electric_bike	2023-04-02 8:37:28	2023-04-02 8:41:37	member	0:04:09	7
34E4ED3ADF1D821B	electric_bike	2023-04-19 11:29:02	2023-04-19 11:52:12	member	0:23:10	3
5296BF07A2F77CB5	electric_bike	2023-04-19 8:41:22	2023-04-19 8:43:22	member	0:02:00	3
40759916B76D5D52	electric_bike	2023-04-19 13:31:30	2023-04-19 13:35:09	member	0:03:39	3
77A96F460101AC63	electric_bike	2023-04-19 12:05:36	2023-04-19 12:10:26	member	0:04:50	3

-- total number of rows
```
SELECT COUNT(*) AS number_of_rows
FROM processed_cyclistic;
```

number_of_rows
1749135

-- number of members v casual users
```
SELECT member_casual, COUNT(*) AS num_of_users
FROM processed_cyclistic
GROUP BY member_casual;
```

member_casual	num_of_users
member	1,067,974
casual	681,161

- there are more members and casual users
- note that this data in only for Q2 (March-May)
- therefore in this quarter we're looking to convert 681161 users to membership

-- types of user and there rideable_type
```
SELECT rideable_type, count(rideable_type) as num_of_users
FROM processed_cyclistic
GROUP BY rideable_type;
```

rideable_type	num_of_users
electric_bike	960,749
classic_bike	752,012
docked_bike	36,374

- most popular rideable_type is electric bike

-- rideable_type counts with filter; member

```
SELECT rideable_type, count(rideable_type) as num_of_users
FROM processed_cyclistic
WHERE member_casual = 'member'
GROUP BY rideable_type;
```

rideable_type	num_of_users
electric_bike	573,163
classic_bike	494,811

-- rideable_type counts with filter; casual

```
SELECT rideable_type, count(rideable_type)
FROM processed_cyclistic
WHERE member_casual = 'casual'
group by rideable_type;
```

rideable_type	num_of_users
electric_bike	387,586
classic_bike	257,201
docked_bike	36,374

- both members and casual user prefer/use electric bike most often
- only casual users use docked bikes

-- max ride_length

```
SELECT MAX(ride_length) max_ridelegnth
FROM processed_cyclistic;
```

max_ridelegnth
23:59:03

- longest ride = almost 24 hours

-- mode(most common) day of week

```
SELECT day_of_week,COUNT(day_of_week) as user_count
FROM processed_cyclistic
GROUP BY day_of_week
ORDER BY user_count DESC
LIMIT 1;
```

day_of_week	user_count
6	287,408

- most common day of the week for users is Friday

-- average ride length for users by day_of_week
```
SELECT day_of_week, ROUND((AVG(ride_length)/60),0) as avg_ridelength_mins
FROM processed_cyclistic
GROUP BY day_of_week
ORDER BY avg_ridelength_mins DESC;
```

day_of_week	avg_ridelength_mins
7	36
6	36
5	29
1	28
4	26
3	25
2	25

- longest rides occur on Friday and Saturday for all users
- maybe explore this further for each user type

-- number of rides for users by day_of_week
```
SELECT day_of_week, COUNT(ride_id) AS num_of_rides
FROM processed_cyclistic pc
GROUP BY day_of_week
ORDER BY num_of_rides DESC;
```

day_of_week	num_of_rides
6	287,408
5	275,373
4	272,744
3	254,966
2	233,602
7	215,480
1	209,562

- similar to ride length average users take more rides on Saturday

-- average ride_length for members and casual riders
```
SELECT member_casual, ROUND((AVG(ride_length)/60),0) as avg_ridelength_mins
FROM processed_cyclistic
GROUP BY member_casual
ORDER BY avg_ridelength_mins DESC;
```

member_casual	avg_ridelength_mins
casual	42
member	21

- here we see that the average ride length for members is longer than that of members
- maybe we could incentivize membership for those who take longer rides