SQL Script for Capstone Project

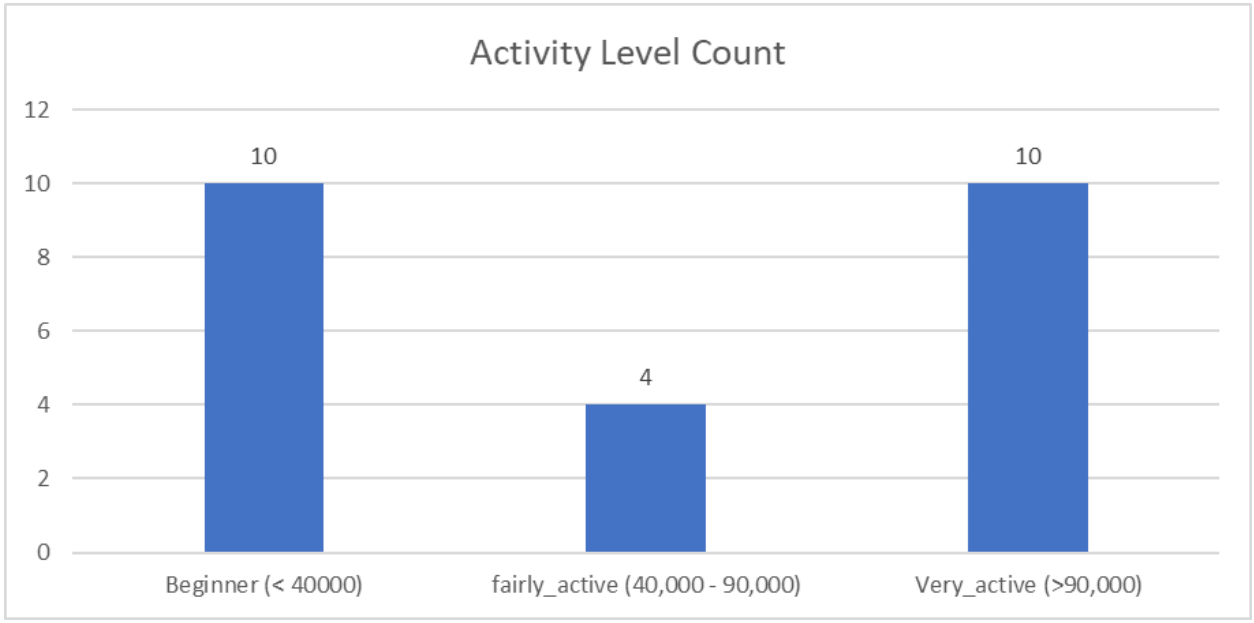
```
 -- After Cleaning the data, To get a better understanding, the datasets - daily activity and sleep day were merged using their primary key called “ID”.

SELECT
  *
FROM
  `my-project-1234-391913.dailyActivity.dailyActivity` AS daily_activity
INNER JOIN
  `my-project-1234-391913.dailyActivity.sleepday` AS sleep
ON
  dailyactivity.id = sleep.id


 -- To show the distribution of customers and users, for the first analysis I used the “steps” column to see if user were
    • Beginners - < 40,000 steps in 2 month
    • Fairly Active - between 40,000 and 90,000 steps in 2 month
    • Very Active - > 90,000 step in 2 month
        ○ Data Points ranged between 2,366 - 156,880 steps in 2 month
 --This can help answer the business question by showing the distribution of smartwatch users.

SELECT
  id,
  CASE
    WHEN total_steps_per_day < 40000 THEN "Beginner"
    WHEN total_steps_per_day BETWEEN 40000 AND 90000 THEN "fairly_active"
  ELSE
  "Very_active"
END
  AS activity_level_per_total_steps
FROM (
  SELECT
    ID,
    total_steps/60 AS total_steps_per_day
  FROM (
    SELECT
      ID,
      SUM(TotalSteps) AS total_steps
```

```
  FROM
    `my-project-1234-391913.dailyActivity.ac_sleep`
  GROUP BY
    Id ))
```



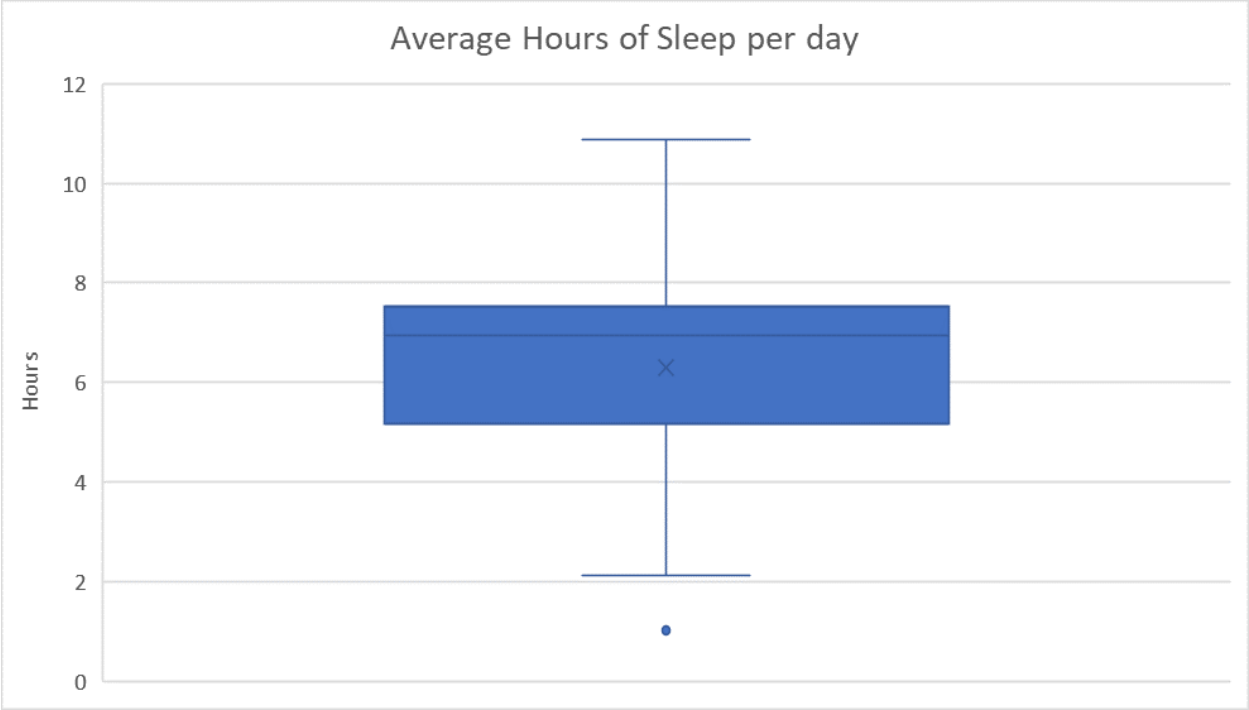
Analysis:

- Results show that there is an **even** distribution between Beginners and Ver_active users.

2.

```
-- Second Analysis was to Find the Average hours of sleep per user to show users sleeping distribution.

SELECT
  id,
  AVG(sleep_day) AS Average_sleep_per_day_in_hr
FROM (
  SELECT
    id,
    TotalMinutesAsleep/60 AS sleep_day
  FROM
    `my-project-1234-391913.dailyActivity.ac_sleep` )
GROUP BY
  Id
```



Analysis:

- Result shows users on average sleep approximately 8 hours per night.

3.

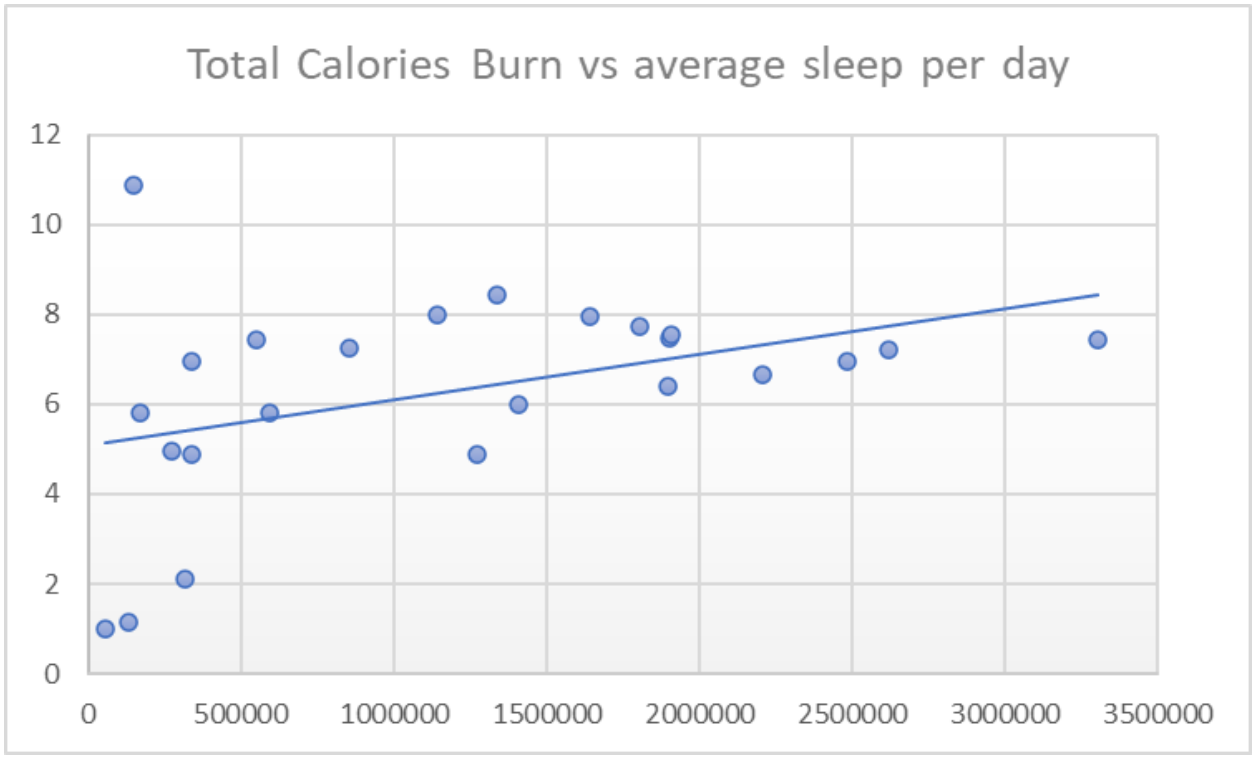
-- third Analysis was to find Correlation between Sleep Hours and Total Calories Burned.

- This shows the marketing team whether or NOT total calories burn is correlated with having a consistent and better sleep
    - In other words whether or not Carliers burn leads to having better sleep.

--This can help answer the business question by showing how users might use these two different features on a relationship basis.

```
SELECT
  id,
  SUM(Calories) AS total_calories_burn,
  AVG(sleep_day) AS Average_sleep_per_day_in_hr
FROM (
  SELECT
    id,
    Calories,
    TotalMinutesAsleep/60 AS sleep_day
  FROM
```

```
    `my-project-1234-391913.dailyActivity.ac_sleep` )
GROUP BY
  Id
```



Analysis:

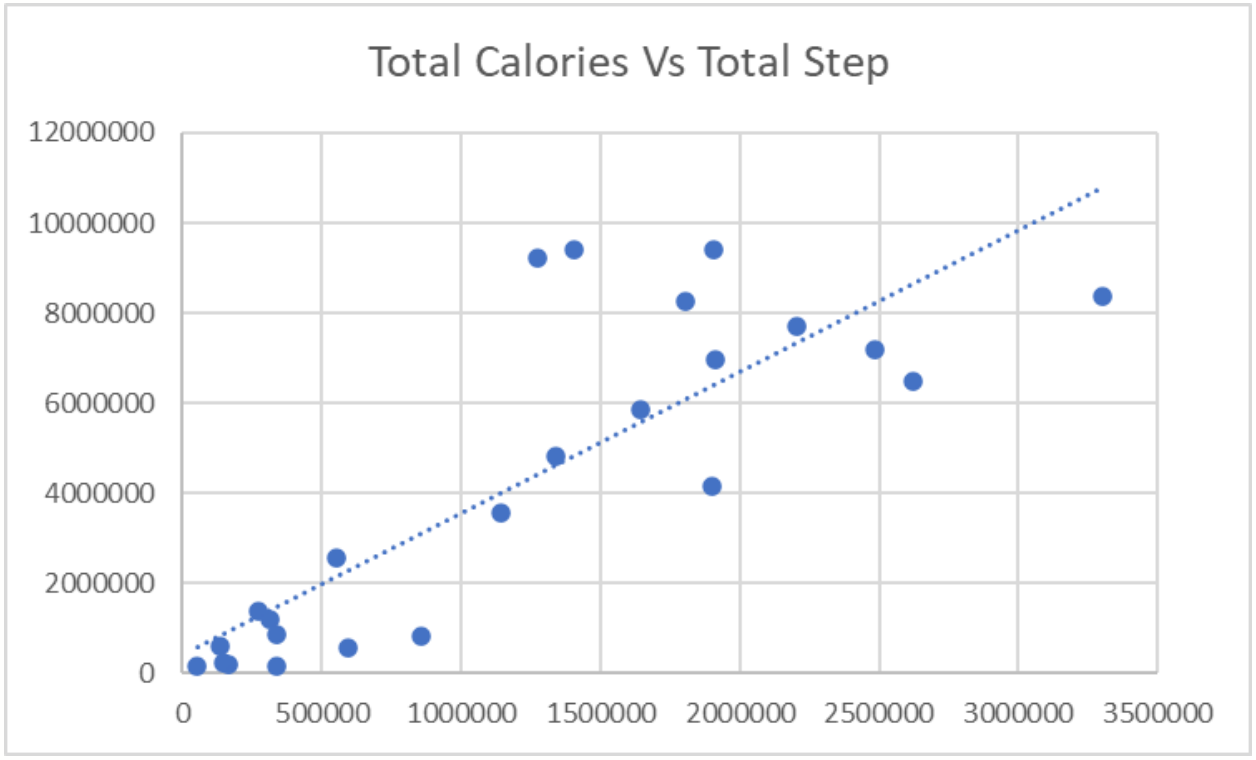
- Results show that Total Calories Burned and Average sleep per night is slightly correlated.
- This shows that these two feature are often used together
    - Also shows that consist calorie burn leads to consistent sleep schedule

4.

```
-- Forth Analysis was to find Correlations between Total Calories Burned and Total Steps.
--This can help answer the business question by showing how users might use these two different features on a relationship basis.

SELECT
    id,
    total_calories,
    total_step
  FROM (
```

```
  SELECT
    id,
    SUM(Calories) AS total_calories,
    SUM(TotalSteps) AS total_step
  FROM
    `my-project-1234-391913.dailyActivity.ac_sleep`
group by Id)
```



Analysis

- Results showed there is a strong correlation between Total Calories Burned and Total Steps taken.
- This shows that these two feature are often used together because they go hand to hand
    - This shows the strongest correlation and reason people use smartwatch devices.