

SQL Code for Bellabeat Capstone

--Which feature is being most used by users; the distance tracker, sleep or weight?
--Here, I joined the tables for "daily_activity", "sleep_day", and "weightLog_info"
to get a total count of unique Ids for each table:

```
SELECT
Count(Distinct(Activity.Id)) AS TotalActivityId,
Count(Distinct(Sleep.Id)) AS TotalSleepId,
Count(Distinct(Weight.Id)) AS TotalWeightId
FROM `naomis-first-sandbox-project.fitabase_data.daily_activity` AS Activity
Full Outer JOIN
`naomis-first-sandbox-project.fitabase_data.sleep_day` AS Sleep
ON
Activity.Id = Sleep.Id
Full Outer JOIN
`naomis-first-sandbox-project.fitabase_data.weightLog_info` AS Weight
ON
Activity.Id = Weight.Id
```

--To see how many users are using all 3 of the features, I ran the same query, but
used inner joins instead:

```
SELECT
Count(Distinct(Activity.Id)) AS TotalActivityId,
Count(Distinct(Sleep.Id)) AS TotalSleepId,
Count(Distinct(Weight.Id)) AS TotalWeightId
FROM `naomis-first-sandbox-project.fitabase_data.daily_activity` AS Activity
JOIN
`naomis-first-sandbox-project.fitabase_data.sleep_day` AS Sleep
ON
Activity.Id = Sleep.Id
JOIN
`naomis-first-sandbox-project.fitabase_data.weightLog_info` AS Weight
ON
Activity.Id = Weight.Id
```

--Next, I wanted to see how much total distance was spent in each intensity category.

```
SELECT
SUM(VeryActiveDistance) AS Very,
SUM(ModeratelyActiveDistance) AS Moderate,
SUM(LightActiveDistance) AS Light,
```

```
SUM(SedentaryActiveDistance) AS Sedentary
FROM `naomis-first-sandbox-project.fitabase_data.daily_activity`
```

--...and how many hours were spent in each category.

```
SELECT
SUM(VeryActiveMinutes)/60 AS Very,
SUM(FairlyActiveMinutes)/60 AS Fairly,
SUM(LightlyActiveMinutes)/60 AS Lightly,
SUM(SedentaryMinutes)/60 AS Sedentary
FROM `naomis-first-sandbox-project.fitabase_data.daily_activity`
```

--Then, I wanted to figure out the total and average distance per user.

```
SELECT
Id,
SUM(TotalDistance) AS TotalDistance,
AVG(TotalDistance) AS AverageDistance
FROM `naomis-first-sandbox-project.fitabase_data.daily_activity`
GROUP BY (Id)
ORDER BY (Id) DESC
```

--I also wanted to find out what the average distance for all users was, as well as the maximum and minimum.

```
SELECT
AVG(TotalDistance) AS AverageDistance,
MIN(TotalDistance) AS ShortestDistance,
MAX(TotalDistance) AS LongestDistance
FROM `naomis-first-sandbox-project.fitabase_data.daily_activity`
```

--How many days did each user use their watch?

```
SELECT
Id,
Count(ActivityDate) AS DaysUsed
FROM `naomis-first-sandbox-project.fitabase_data.daily_activity`
Group BY Id
ORDER BY (DaysUsed) DESC
```

--What time of day are users the most active?

--Here we find user activity by hour:

```
SELECT
FORMAT_DATETIME('%T', ActivityHour) AS Time,
Sum(Calories) AS Sum_Calories,
```

```
Sum(StepTotal) AS Sum_StepTotal
FROM `naomis-first-sandbox-project.fitabase_data.hourly_all`
Group By Time
ORDER BY Time
```

--Which day of the week are users most active?

```
SELECT
FORMAT_DATE('%A', ActivityDate) AS Days,
Sum(TotalDistance) AS TotalDistance
FROM `naomis-first-sandbox-project.fitabase_data.daily_activity`
GROUP BY Days
ORDER BY Days
```

--How many users used the logged distance function?

```
SELECT
Count(Distinct(Id)) AS NumberOfLoggedActivities
FROM `naomis-first-sandbox-project.fitabase_data.daily_activity`
WHERE LoggedActivitiesDistance > 0
```

--...and how much distance did each of those users record with that feature?

```
SELECT
Id,
Sum(LoggedActivitiesDistance) AS LoggedActivities
FROM `naomis-first-sandbox-project.fitabase_data.daily_activity`
Group BY Id
ORDER BY (LoggedActivities) DESC
```

--What is the average hours of sleep for all users and the maximum and minimum?

```
SELECT
AVG(TotalMinutesAsleep/60) AS Average,
MIN(TotalMinutesAsleep/60) AS Least,
MAX(TotalMinutesAsleep/60) AS Most
FROM `naomis-first-sandbox-project.fitabase_data.sleep_day`
```


