# Problem Statement

Autolib is an electric car sharing service company. As a data scientist I have been tasked to investigate a claim about blue cars. The claim is that the total number of blue cars taken are not the same as returned cars on most days of the week

In this case the null hypothesis is the sum of the total numbers of blue cars taken are not the same as the returned ones most days of the week. .

# Data Description

For this research to be a successful we have to;

1. Find and deal with outliers, anomalies and missing data within the dataset.
2. Plot appropriate univariate and bivariate summaries.
3. Implement the solution by performing hypothesis tests.
4. Challenging our solutions on how we can make improvements.

# Hypothesis testing procedure

The following steps will be used to test the hypothesis;

1. Formulate the null hypothesis and the alternate hypothesis.

Null Hypothesis -> Ho: U1 ≠ U2

Alternative Hypothesis -> U1 = U2

1. 100 samples will be collected from the days sample and a difference between the days of the week will be calculated to know if this is true.
2. Alpha is set to be 0.05

𝛼 = 0.05

1. T test will be used to test the hypothesis

# Summary and conclusion

After the T test was conducted, the null hypothesis was accepted. The amount of blue cars taken are not the same number as those returned.