1. **PROBLEM STATEMENT.**

We have been tasked to understand electric car usage by solving another research question; when one postal code is more popular than the other.

Null Hypothesis.

Postal code 75008 is the most popular on weekends as compared to postal code 75015.

Alternative Hypothesis.

Postal code 75008 is not the most popular as compared to postal code 75015.

The comparison helps in determining the number of cars required to be available in a particular station postal code on weekends.

1. **DATA DESCRIPTION.**

To conduct the hypothesis test we will use the dataset : [http://bit.ly/DSCoreAutolibDataset (Links to an external site.](http://bit.ly/DSCoreAutolibDataset%20(Links%20to%20an%20external%20site.))

We will be analyzing the bluecars and the difference in their usage between two postal codes.

1. **HYPOTHESIS TESTING PROCEDURE.**

We will begin with sampling, to make work easier. Random sampling will be used. 1000 rows will be selected from the 4541 in the sample.

X = mean

μ= sample mean

σ= standard deviation

√n= square root of the number of samples

1. **HYPOTHESIS TESTING RESULT**

* The Z score is -3.6406804918102185
* The P\_value= 1 - significance level) p\_value=0.9998

Since the P\_value is greater than the significance level it means we accept our Null hypothesis since there is enough evidence to support the claim.

1. **SUMMARY AND CONCLUSION**

We have plotted appropriate univariate and bivariate summaries while recording our observations.

We have implemented the solution by performing hypothesis testing.

We have challenged our solution by providing insights on how we can make improvements.

We have concluded that we are accepting our null hypothesis.

The link to the analysis is : <https://colab.research.google.com/drive/12zWzJ-HNylLbwCg3My5g81bl6toQIVYP?usp=sharing>