**Used cars prices Exploration...**

**Dataset:**

The data consists of information regarding 5975car, including fuel type, transmission type, mileage, engine size and other car features. The dataset can be found in Kaggle here (<https://www.kaggle.com/avikasliwal/used-cars-price-prediction>)

**Summary of findings…**

In the exploration, I found that some brands like Maruti and Hyundai in addition of Desil fuel type and manual transmission are very common in the Indian car market.

I found a strong positive relationship between car engine size and the price, when price is transformed to be on a logarithmic scale and I have limited the engine size to be from (66 – 4000) CC the relationship was approximately linear.

I found some strange result initially when I was investigating on the relationship between the transmission type and the car mileage that when it comes with automatic transmission the car mileage (kmpl) decreases which is opposite to reality, after some analysis between the relationships between engine size , transmission type and car mileage I found that automatic transmission comes with bigger engines in this dataset, and there was a negative relationship between engine size and car mileage, but at the same engine size automatic transmission was better than manual

**Key insights for the presentation…**

For the presentation, I focus on car mileage and price by using the other features, I start by an introduction to my dataset followed by the main feature of interest

Afterward, I introduce each variable one by on using bar and hist plots to take an overview of the data, then I make Bivariate Exploration between all the variables focusing on price

After that I has some strange relation between the transmission type and car mileage so I make more analysis by using Multivariate Exploration between the transmission, mileage and engine size, then I found that automatic transmission comes with bigger engine size but for the same engine size the automatic transmission is better than manual transmittion

**To conclude my analysis and the findings…**

* Indian car market isn't expensive due to the average cost of the cars are around 6000 dollar
* Diesel fuel type is more popular in the Indian market and it more efficient than Petrol
* Cars with manual transmission is about twice cars with automatic transmission
* Price has positive correlation with Engine size of the car, and the mileage has negative correlation with engine size so if we want to buy an economic car we will focus on cars with small engines as they have low price and high mileage, so we will also reduce our fuel consumptio