Data Set

- This is the dataset about Electric vehicles. We take different features about each electric vehicles. that includes
- We will find some interesting insights about this data using different features

These are the columns of our dataset

Index(['Name', 'Battery(KWH)', 'Acceleration', 'TopSpeed', 'Range', 'Efficiency', 'FastChargeSpeed', 'Drive', 'Number of Seats', 'PriceinGermany', 'PriceinUK'],

TASKS: (Possible Questions)

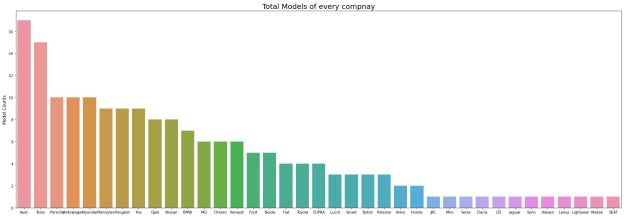
Some basic tasks would include

- 1. Which car has the fastest acceleration? (less time for top speed)
- 2. Which company produces most Electric cars??
- 3. Which has the highest efficiency? **Efficiency = Range(km)/battery (kWh)**
- 4. Which Company provides best car w.r.t Efficiency, Range, Top speed and Battery Power ??
- 5. Comparison among 2 Features (Efficiency, Range, Fast Charge Speed, Top Speed) with pearson coefficients.
- 6. Does a difference in power train effect the top speed, efficiency?
- 7. Suggest budget on the basis of Features.

Answers:

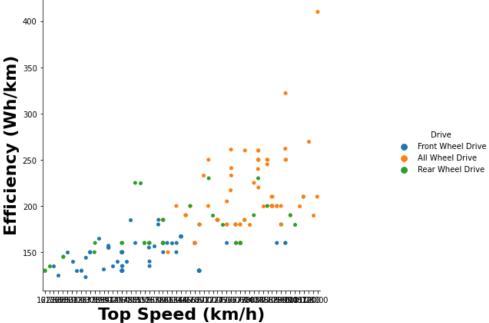
We will take average of car features on the basis of Company Name. It becomes easy for analysis. These 37 rows represents 180 rows of electric cars. There might be some sharp changes in graphs due to this sampling. We can not check 180 rows in 1 graph.

- 1. Average fastest acceleration is Lucid because it takes less time to achieve max speed
- 2. Audi produces most Electric cars then come TESLA



- 3. Toyota gives highest average highest efficiency
- 4. Average Top speed is good in Tesla cars. Average Range is good for Lucid Cars. Average Fast charge speed is good for Lucid cars Tesla gives highest Battery power(KWH) than other companies Check graphs in pdf Code file
- 5. If we purchase battery more than 125 kwh then efficiency decreases with the battery Vehicle Range is increasing with the battery specially after 125 KWH with correlation of 0.8 Top speed is increasing with Battery power Vehicle Efficiency is randomly changing with Top speed, no specific relationship

Vehicle Efficiency compared with Top Speed for different Drive Wheels



- 6. All drive wheels have more efficiency and range.
- 7. We use linear regression model for training model and suggesting budget. our score is 0.5.