**Assignment Questions: (8 marks)**

*Prior to summary statistics load your data and identify and missing values or duplicates and drop them.*

* **Identify the variable types in the given data set.**
* **Make a bar graph for manufacturer type**
* **Make a pie chart for showing vehicle type by percentage**
* **Calculate average Price of all cars by using correct measure of central Tendency**
* **Calculate the variance and standard deviation for numerical** columns such as Sales\_in\_thousands, \_\_year\_resale\_value, Price\_in\_thousands, Engine\_size, Horsepower
* **For the same columns Calculate IQR and identify outliers in these columns**

Q1 = df[column].quantile(0.25)

Q3 = df[column].quantile(0.75)

IQR = Q3 - Q1

outliers = df[(df[column] < Q1 - 1.5 \* IQR) | (df[column] > Q3 + 1.5 \* IQR)]

* **Make Histograms for all Numerical columns and identify the distribution of type by calculating skewness;**

*Note : If the skewness is 0, it indicates a perfectly symmetrical distribution.*

*If the skewness is negative, it means the distribution is skewed to the left (long left tail).*

*If the skewness is positive, it means the distribution is skewed to the right (long right tail).*

**Happy learning!**