

# The Cars Dataset Analysis

## Importing Data and relevant Python Libraries

```
In [ ]:  ▶ import pandas as pd
```

```
In [ ]:  ▶ data = pd.read_csv(r"C:\Users\hp\Downloads\2. Cars Data1.csv")  
data
```

## Data Exploration

```
In [ ]:  ▶ data.info()
```

No. of rows and columns in the dataset

```
In [ ]:  ▶ data.shape
```

## Data Analysis

Q1: Find all null values in the dataset. If there is a null value, fill it with mean

```
In [ ]:  ▶ data.isnull().sum()
```

```
In [ ]:  ▶ data['Cylinders'].fillna(data['Cylinders'].mean(), inplace = True)  
data.isnull().sum()
```

Q2: Find the different types of make and the count of each make in the dataset

```
In [ ]:  ▶ data ['Make'].value_counts()
```

Q3: Show all the records where origin is asia or europe

```
In [ ]:  ▶ data.head()  
#data[(data['Origin'] == 'Asia' ) | (data['Origin'] == 'Europe')]  
data[data['Origin'].isin(['Asia', 'Europe'])]
```

Q4: Remove all records where weight >4000

```
In [ ]: ▶ data[~(data['Weight']>4000)]
```

Q5: Apply a function on a column. increase the values of MPG\_City column by 3

```
In [ ]: ▶ data['MPG_City'] = data['MPG_City'].apply(lambda x:x+3)  
data.head()
```