

## Case Study 2 - K-means

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### Problem Statement:

Consider yourself to be Sam who is a data scientist. He has been approached by a retail car showroom to help them segregate the cars into different clusters

### Tasks to be performed:

1. Building the k-means clustering algorithm:
    - a. Start off by extracting the 'mpg', 'displacement' & 'horsepower' columns from the 'mtcars' data.frame. Store the result in 'car\_features'
    - b. Build the kmeans algorithm on top of 'car\_features'. Here, the number of clusters should be 3
    - c. Bind the clustering vector to 'car\_features'.
    - d. Extract observations belonging to individual clusters
  
  2. On the same 'car\_features' dataset build a k-means algorithm, where the number of clusters is 5
    - a. Bind the clustering vector to 'car\_features'
    - b. Extract observations belonging to individual clusters
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