**TRAFFIC SIGNAL CLASSIFICATION**

In this project, we will use a convolutional Neural Network to build train and test a traffic sign classification model. We will build this model using Tensor Flow and Keras. It is a multiclass classification problem. This model can be used to make smarter cars.

After this project, you will be able to create a Multiclass classification model using Deep Learning.

**THE STEPS TO SOLVE THE PROBLEM**

1. Finding data on Kaggle and loading it into collab.

5-Checking class imbalance

4-Converting the images into a NumPy array and normalize them

3-Finding out the mean of the dimensions and resizing all images accordingly

2- Pre-processing the images and visualizing them

6- Splitting the data and performing one-hot coding

10- Visualizing the original and predicted labels for the test images.

9- Pre-processing the test data and make predictions on it.

8-Plotting the accuracy and loss against each EPOCH

7- Creating the model architecture. Compiling the model and then fitting it.