Supervised Learning

We broadly divide supervised learning methods into two types -

Regression and Classification

In case of regression, the output value(the value that the model predicts) is continuous and in case of classification, it is discrete.

For example, if we are predicting a price of a plot of land (say based on factors like distance from town, water availability, pollution level etc), it comes under regression. And if we are predicting whether a buyer will buy that plot or not , here, the result is either a yes or no. This prediction model comes under classification.

Here, we will dive into one of the most popular Regession model - - *Linear regression* and one of the most popular Classification model - *Logistic Regression*

*Note- even though there is a ‘regression’ in ‘logistic regression’ it is a classification algorithm.*

Linear Regression - Go to [this colaboratory](https://colab.research.google.com/drive/1WOV1BjLKiaZq8msxERfgIDXofGYhTnHX?usp=sharing)

Logistic Regression - Go to [this colaboratory](https://colab.research.google.com/drive/1Chch6CbinqhMb9o6S0cEWIH62d5-CMTf?usp=sharing)

These give a basic understanding. After this you can also try out models like Decision tree, Random Forest Regression, Naive Bayes etc. You can search in youtube, kaggle etc and you can get code just by plainly searching in GitHub.

*Task : Use linear regression to find the relationship between the daily minimum and maximum temperature in world war two.*

*Load the dataset from* [*here*](https://www.kaggle.com/smid80/weatherww2/download)*. You will need to edit the dataset a lot (We call it data augmentation/ preprocessing).*

*Dont worry if you get stuck. Just search plainly on Github and there are tons a lot of answers uploaded on* [*Kaggle*](https://www.kaggle.com/smid80/weatherww2/data?select=Summary+of+Weather.csv)*. Check outthose solutions and learn from them. Thats how we begin the journey!*