**DAY-5 [21-09-2021] HyperParameter Tuning:**

Hyper parameter tuning: In machine learning, hyperparameter optimization or tuning is the problem of choosing a set of optimal hyperparameters for a learning algorithm. A hyperparameter is a parameter whose value is used to control the learning process.

Fine tuning parameters: Fine-tuning, in general, means making small adjustments to a process to achieve the desired output or performance. Fine-tuning deep learning involves using weights of a previous deep learning algorithm for programming another similar deep learning process.

In KNNs:

* The number of neighbors to inspect in a KNN model is a hyperparameter. It is specified when you create the model.
* The table of actual nearest neighbors in a KNN model is a parameter. It is computed when you train the model.

In SVMs:

The SVM has another set of parameters called hyperparameters: The soft margin constant, C, and any parameters the kernel function may depend on (width of a Gaussian kernel or degree of a polynomial kernel).