**Supervised Model For Mobile Phone Price Classification**

Support vector machine classifier is one of the most popular machine learning classification algorithm. Svm classifier mostly used in addressing multi-classification problems.

**In short:** Multi-classification problem means having more that 2 target classes to predict.

Implementation is done Using Python language and sklearn libraries.

Phone price classification dataset is having 20 features of phones from different brand and one target class.

**These 20 features are:**

* battery\_power
* blue
* clock\_speed
* dual\_sim
* fc
* four\_g
* int\_memory
* m\_dep
* mobile\_wt
* n\_cores
* pc
* px\_height
* px\_width
* ram
* sc\_h
* sc\_w
* talk\_time
* three\_g
* touch\_screen
* wifi

**Target Class:**

The price\_range type is the target class and it having 4 types

* 0
* 1
* 2
* 3

The idea of implementing svm classifier in Python is to use the phone specification features to train an SVM classifier and use the trained SVM model to predict the price\_range.

Approach:

* Training csv is split into Training data(80%) and Test data(20%) to build the model.
* We check the accuracy of the model after learning from training data.
* Accuracy of the model by Confusion Matrix and Classification Report.
* Test data is fed to classify the data into 4 categories of price\_range.