# Data Dictionary

* battery\_power- energy in mAh.
* blue- whether the phone has Bluetooth or not.
* clock\_speed- microprocessor speed.
* dual\_sim- phone supports dual sim or not.
* fc- front cameras mega pixels.
* four\_g- phone supports 4g or not.
* int\_memory- internal memory in GB
* m\_dep- mobile depth in cm.
* mobile\_wt- weight of the phone.
* n\_cores - no. of cores in processor.
* pc- primary camera mega pixels.
* px\_height- pixel resolution height.
* px\_width- pixel resolution width.
* Ram- RAM in megabytes.
* sc\_h- screen height in cm.
* sc\_w- screen width in cm.
* talk\_time- longest time when a single battery charge will last.
* three\_g - phone has 3g or not.
* touch\_screen- phone has touch screen or not.
* Wifi- phone has wifi or not.
* price\_range- price range of the phone(4 class)

# INSIGHTS

* ram(predictor)- This variable has a very high correlation with the target variable.
* Multi collinearity is not a problem in this data set.
* The target variable has 4 classes which are equally balanced.
* The categorical predictor variables are equally balanced except for three\_g.
* The continuous predictor variables are uniformly distributed except for fc, px\_height and sc\_w.
* SVC, CatBoost, LGBM Boost, XG Boost had a prediction accuracy of more than 90%