Ensemble Technique

→ Ensemble Techniques are those techniques in which multiple base models are trained.

→ 2 types:
   (i) Bagging
   (ii) Boosting.

Bagging

→ In this technique main dataset is divided into parts

→ Various base models are trained parallely on each dataset

→ Collective outputs are taken.

→ Regression + Classification.

Ex. Random Forest

Boosting

→ In this technique base models are used sequentially to form weak learners.

→ Collection of weak learners form a strong learner.

→ Regression & Classification.

Ex.

(i) AdaBoost
(ii) Gradient Boost
(iii) XGBoost