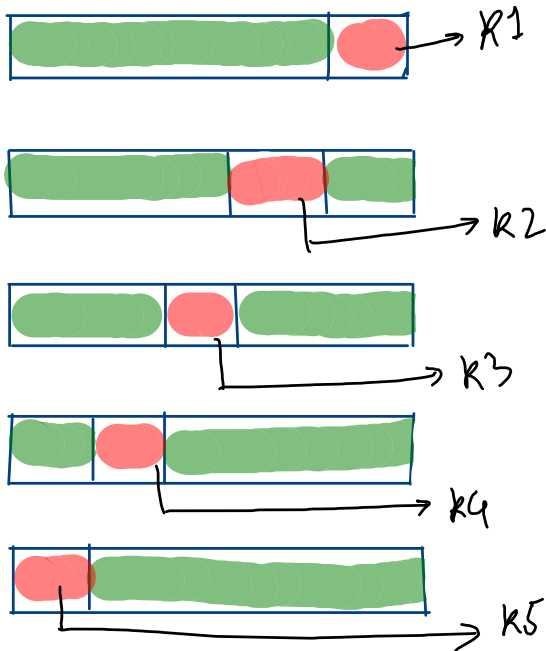


Cross Validation (K-fold):-

In cross validation, we divide the dataset into K equal parts; and each time we train and test the model to calculate the accuracy. This step is repeated K times such that each time, a new fold is selected for the training & evaluation. When all the performances are done, we calculate the mean accuracy of all the K -folds to get the final mean accuracy.

With the help of cross validation, we can evaluate our model properly and check if it is overfitting or not. We can use cross_val_score for the cross validation.



$$\text{Mean accuracy} = \frac{K1 + K2 + K3 + K4 + K5}{5}$$