**K Fold Cross Validation**

Techinque used to evaluate the performance of different models.

Ways of Training the model:

A: use all available data for training and test on same dataset

B: split the data into training and testing datasets (does not always work Eg. Training on 80 Algebra questions and testing on 20 geometry questions)

Here, K fold cross validation comes to the rescue

The data is divided into K folds (say 100 samples are folded into 5 folds)

Iteration1: [2,3,4,5] folds are used for training and fold [1] is used for testing and note the score

Iteration 2: [1,3,4,5] folds are used for training and fold [2] is used for testing and note the score

Iteration 3: [1,2,4,5] folds are used for training and fold [3] is used for testing and note the score

….. continue….. till all possible iterations are covered

Find the Average score… that is the answer

Advantages:

Giving variety of samples for training and finding the average scores. So, it more or less covers most of the variety