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For the second assignment, we have been asked to design an experiment running five algorithms over 6 data sets. During this assignment, we have also been tasked with designing an experiment to explain our results from these different algorithms. With these restrictions in mind, the group has come up with a few different ideas about how we will go about this experiment.

First, we need to discuss the ideas of the hyperparameters, or the K-values, from which our algorithm draws its ability to operate. K Nearest Neighbor, or KNN for short, relies on this K-value to influence the decisions made by our algorithm in choosing a nearest neighbor. The decision of the group has been to tune the hyper parameters through an implementation of min-max randomization. For further detail, we will be setting a minimum and maximum from which we will draw out the hyperparameters. We will then discreetly choose one value from that range for each experimental runthrough of our algorithm. The hyperparameter process will be thoroughly tested to make sure that our discrete selection process will not