## CSCI\_447\_Assignment\_2

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Data Main + test:DataFrame{} + train:DataFrame{} + data:Data + data\_dict:DataFrame{} + knn:KNN +k means:KMeans - load\_data():None + split\_data():DataFrame{} +main():None + partitioning around medoids(DataFrame):DataFrame{} + complete data(): Boolean + smooth\_data(): DataFrame{} + pre\_process\_data(): Boolean + k\_fold(int):DataFrame{} KMeans + k\_val: int 1 +find\_medoids(DataFrame, int):DataFrame +find\_centroids(DataFrame, int):DataFrame +loss function(float[]): float KNN + k\_val: int + perform knn(DataFrame, DataFrame, int):String + euclidian\_distance(DataFrame, DataFrame, int): int[] + predict\_by\_distance(float[], int):String + condense(DataFrame): DataFrame + edit(DataFrame): DataFrame +calculate error():Float