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133A Project Report – Part 2

- We used the mapping feature in Python to map our datasets to specific values. Essentially, we are creating a dictionary so we can make a matrix. This allows us to use the matrix to then perform the k-means squared. We sorted each column into their respective mapping group and assigned a 0 for every NaN (no response) (See Code For STD Values)
- Using each group, we created a k-means algorithm to be able to cluster the data set and create a visual k-means graph. We changed the values we assigned to each element in the dictionaries to see how the k-means clustering would change. We were able to change them such that each cluster can be in their distinct location and there is little overlap. (See Code for K-Means Cluster)
- (See Code For SVD Values)
- The matrix table that we were able to make has a linear projection, and we are not exactly sure why. We ran some tests and changed up the data. We need to redo or modify our algorithm so that it corresponds to the other data we found from our dataset. (See Code for Correlation Matrix Results)