Machine Learning
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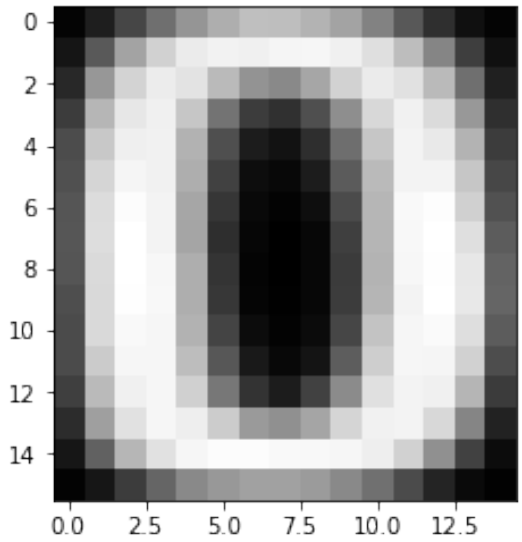
Mini-Project 1

K-Means Clustering:

1. Randomly define K centroids
2. Assign data points to the closest centroid using standard Euclidean distance
3. Calculate the mean values of all points belonging to a centroid, this is the new value of the centroid
4. Repeat steps 2 and 3 for specified iterations, causing convergence

K = 1



For the case where K = 1, there is only one cluster that is created. Hence, running many iterations does not make a difference in the convergence of the centroids.