Homework about dimension reduction (multi-dimensional scaling):

1. Find a dataset from internet
2. Use the algorithm **Multi-dimensional scaling (MDS,** [**https://www.stat.pitt.edu/sungkyu/course/2221Fall13/lec8\_mds\_combined.pdf**](https://www.stat.pitt.edu/sungkyu/course/2221Fall13/lec8_mds_combined.pdf)**, https://www.geeksforgeeks.org/sklearn-multi-dimensional-scaling-mds-python-implementation-from-scratch/)** to reduce the dimensionality of dataset from d to 2 or 3
3. Use scattered plot (https://matplotlib.org/stable/gallery/shapes\_and\_collections/scatter.html) to visualize the result. It is a sweet spot if you can denote data samples from different classes into different colors.
4. Due in 2 weeks