Homework about dimension reduction (principal component analysis):

1. Find a dataset from internet
2. Use the algorithm **Principal Component Analysis** (Page 63 of our ML-textbook) 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.