1. Dimensionality Reduction Techniques are very important in Machine Learning
2. There are mainly two types of ways in which dimensions are reduced. They are:
   1. Projection
   2. Manifold Learning
3. Projection: Generally, we find a closest hyperplane to the dataset and project the dataset on that hyperplane. Some of the famous algorithms used are:
   1. Principal Component Analysis Algorithm: Kernel PCA’s are also used to project data to lower subspace.
4. Manifold Learning: This type of technique is used when the data in higher dimensional space is twisted and cannot be project directly on to the lower subspace (as the data in high dimensional space is more complicated).
   1. Local Linear Embedding