**Dimensionality reduction**

Take the algorithms and the data from the Task 4. Perform the clustering. For each partition:

**Option 1 (100/100)**

Implement several algorithms (with sklearn):

* PCA
* tSNE
* UMAP (for umap use different sets of *n\_neighbors* and *min\_dist* )

Visualize the data for each algorithm.

**Option 2 (150/100)**

Implement several algorithms:

* PCA (**without** sklearn)
* tSNE (with sklearn)
* UMAP (with sklearn) (for umap use different sets of *n\_neighbors* and *min\_dist* )

Visualize the data for each algorithm.

**Option 3 (200/100)**

Implement several algorithms:

* PCA (**without** sklearn)
* tSNE (**without** sklearn)
* UMAP (with sklearn) (for umap use different sets of *n\_neighbors* and *min\_dist* )

Visualize the data for each algorithm.