**Step 1: Reproducing the embedding and cluster**

–To produce the embedding and clusters from the **atussum\_19-reduced.csv** file, we need to run the cells of the **umap\_trying2\_for\_artifact.ipynb** file sequentially. It will produce a file named **“atus\_embed\_cluster.csv”** which contains everything from the atussum\_19-reduced.csv file as well as contains the embedding and cluster for each row. If requires the packages **pandas, numpy, sklearn, matplotlib, hdbscan, umap-learn**. Make sure to install those packages before running.

**Step 2: Generating the interactive interface**

–In this step, we will use the file **“atus\_embed\_cluster.csv”** generated in **Step 1** to produce the visualization. Sequentially run the cells of the file **codes.ipynb** to produce the visualization. Apart from the previous packages, it requires **plotly, scipy, ipywidgets** packages to produce the visualizations. It may require some other packages as well. Make sure to install those packages before running.