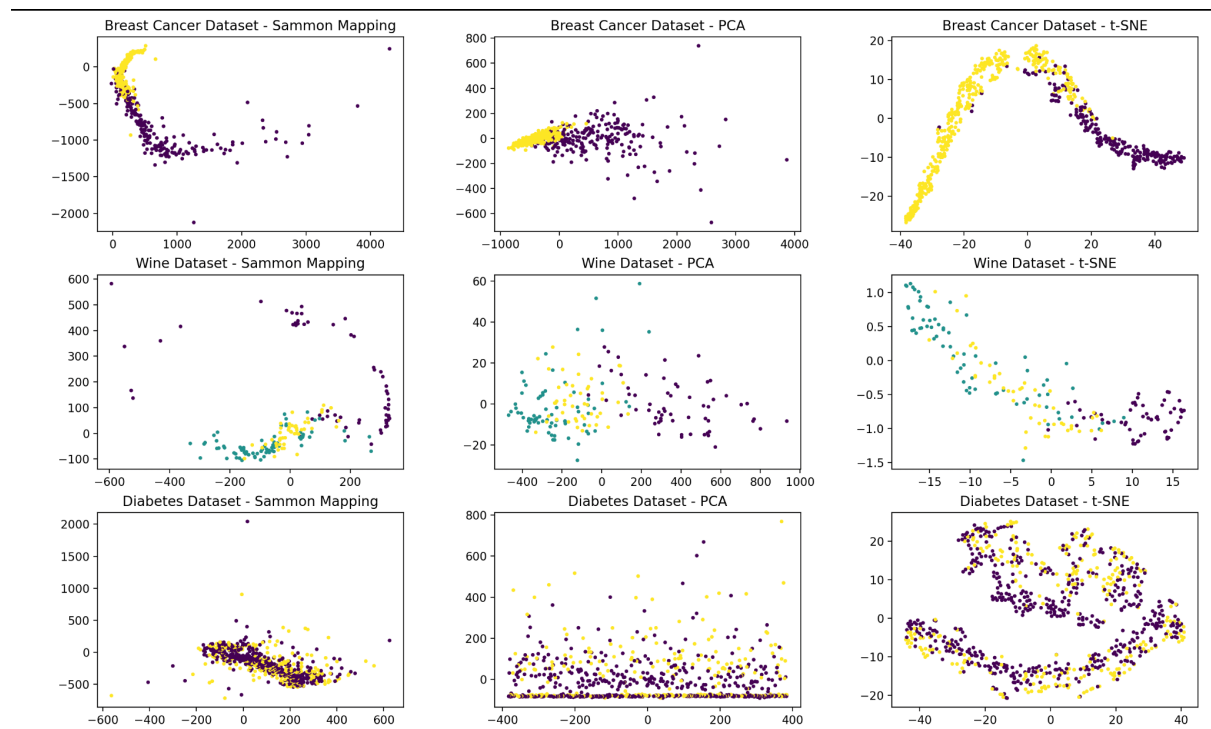


### 3.1:



For the first dataset, we can see that although they are very close, I would say that t-sne performed best. There was not a lot of scattering of the points. However, sammon did separate them a little bit better than t-sne (we can see some purple dots in the yellow of the t-sne).

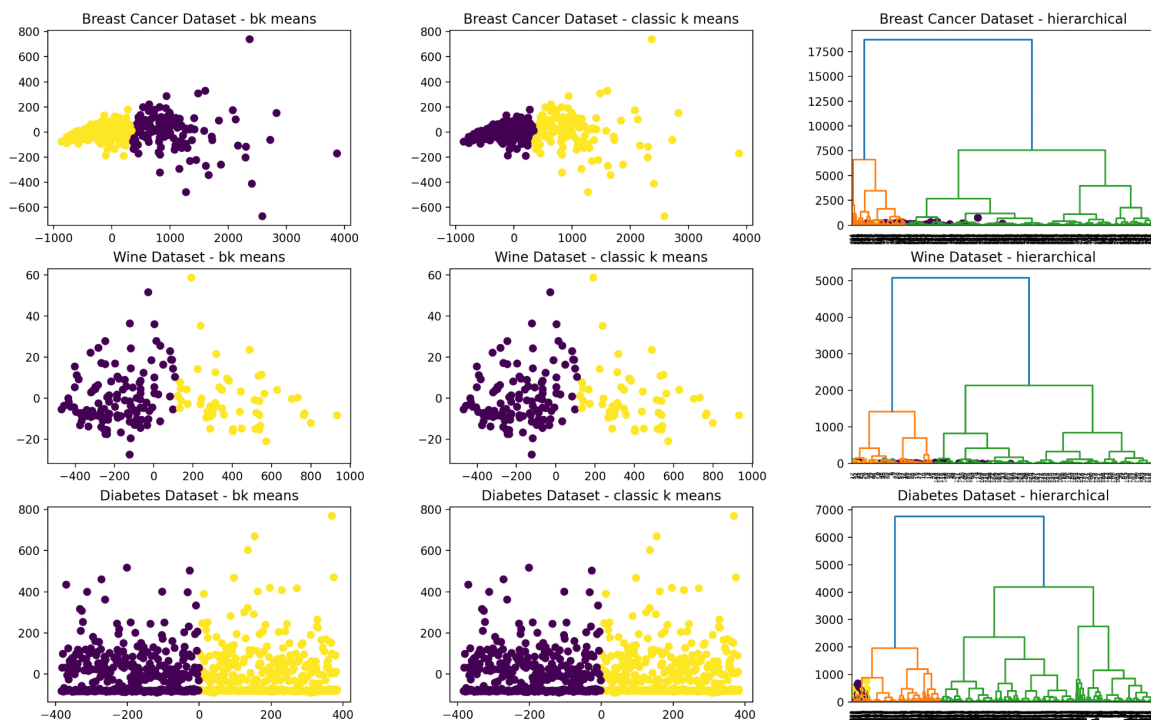
For the 2nd dataset, I think that they all look similar, the only bad part is that sammon once again throws some points around, but keeps it more compact and closer together. I would say t-sne.

For the 3rd dataset (this was the biggest dataset) I think that t-sne once again looks best. PCA has too much clutter by separating them too much, and sammon has them too closely grouped together.

If I need to rank them from best to worst, I would say that T-sne is best, PCA is worst.

The dataset that performed the best across all the algorithms would be breast cancer.

### 3.2



In my opinion, both bk means and kmeans look almost identical. there are very small differences but overall they have very similar performance. Maybe, if we use a different DR technique we may see some differences? I chose PCA for this one.