1. Explain how hierarchical methods operate.

Hierarchical methods operate by creating a rough clustering tree that holds critical information of the data. Then, other clustering algorithms can be used to cluster the finer details of the data by referencing the critical information. This means the algorithm does not need to return to the database for the critical information.

1. Explain how density-based methods operate.

Density-based methods operate by classifying dense areas of data points as clusters. This means that the density of these data points have the same radius. The areas with less density can be categorized as outliers.

1. Explain how Grid-based methods operate.

Grid-based methods operate by forming clusters based on spatial location of data. This is particularly useful for map-based data. By dividing the data by location, we can compute statistical information about each “grid” and gain insight into potential patterns in the data.

1. Please write any questions you may have.

How do I determine when to use one of these methods?