

# Hierarchical Clustering: Basic Concepts

## ❑ Hierarchical clustering

- ❑ Generate a clustering hierarchy (drawn as a **dendrogram**)
- ❑ Not required to specify **K**, the number of clusters
- ❑ More deterministic
- ❑ No iterative refinement

## ❑ Two categories of algorithms:

- ❑ **Agglomerative**: Start with singleton clusters, continuously merge two clusters at a time to build a **bottom-up** hierarchy of clusters
- ❑ **Divisive**: Start with a huge macro-cluster, split it continuously into two groups, generating a **top-down** hierarchy of clusters

