

MACHINE LEARNING WITH PYTHON

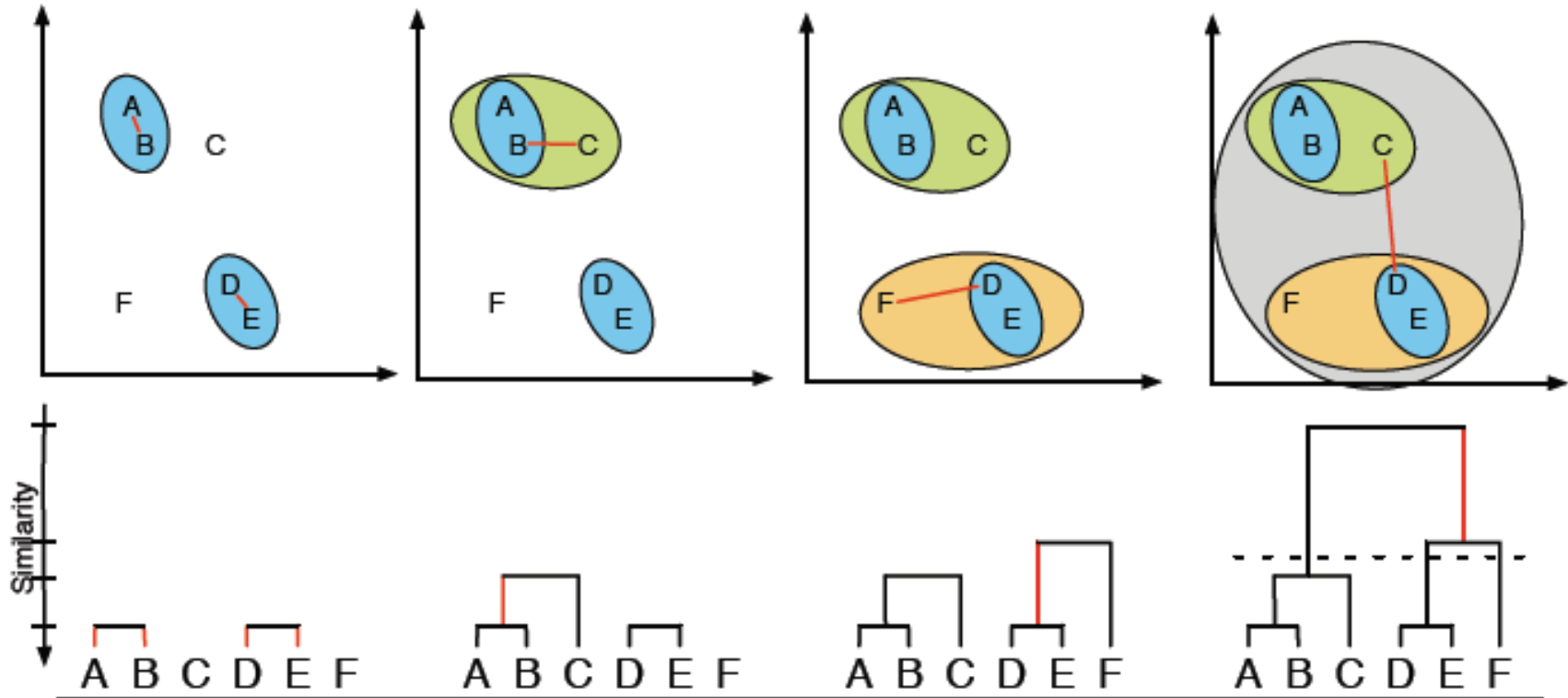
# HIERARCHICAL CLUSTERING

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# Agglomerative Hierarchical Clustering

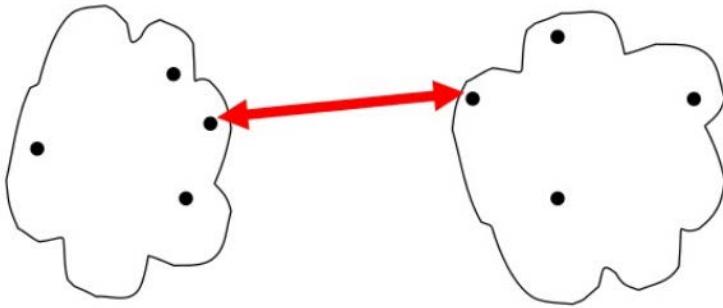
- Connect points according to their distance
- Select cut-off point to split to clusters



# Single vs Complete Linkage

- Single-link

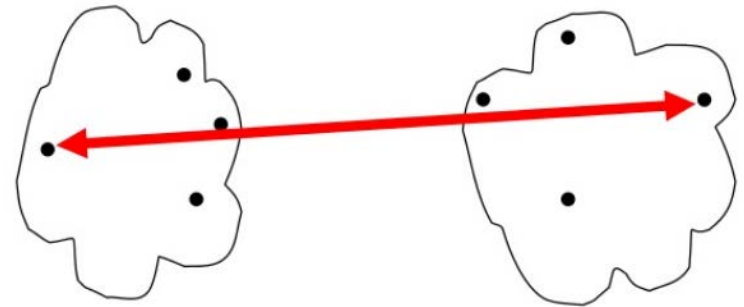
- Smallest distance between an element in one cluster and an element in the other



- Produces large clusters
- Sensitive to outliers

- Complete-link

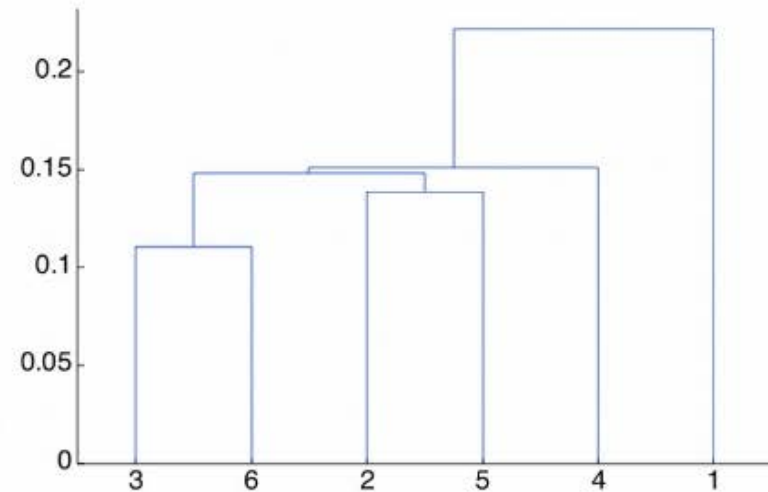
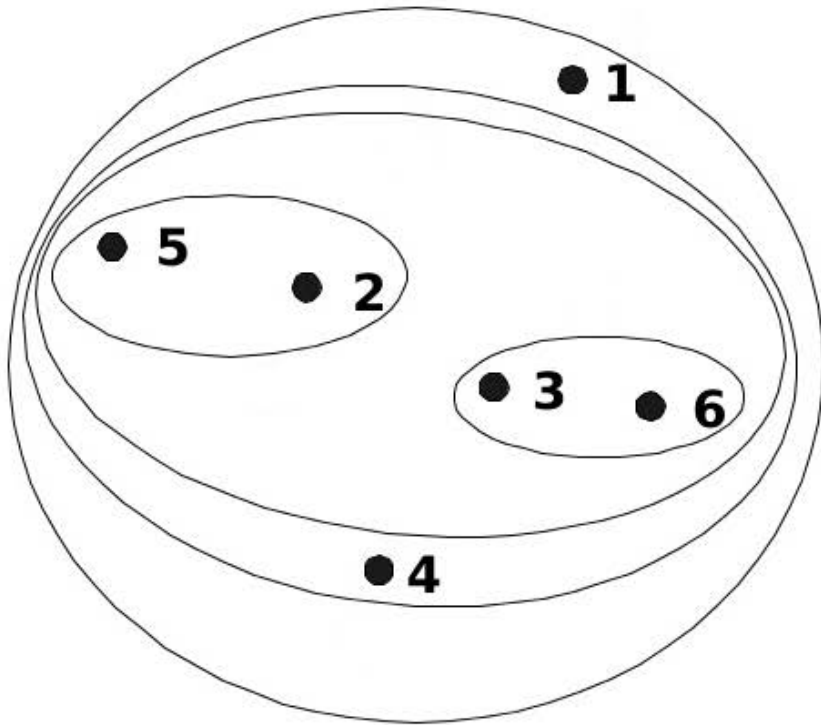
- Largest distance between an element in one cluster and an element in the other



- Produces balanced clusters
- Breaks large clusters

# Single-link

- Example



# Complete-link

- Example

