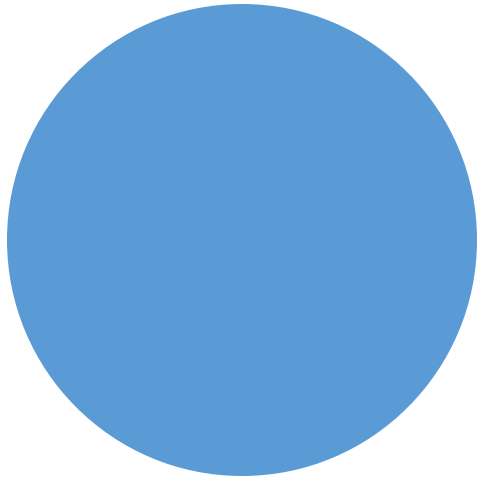
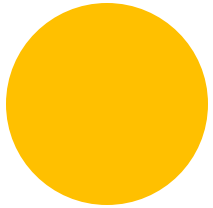



# Cluster Exercise

# K-Means

Perform scaling on your data

Use Elbow method to choose the number of clusters

Perform Cluster

Exam the results, what makes each group unique

# DBSCAN

Perform DBSCAN with min_samples = 2*number_of_features and different values of eps

Display the results on 3 Dimantional Graph using PCA

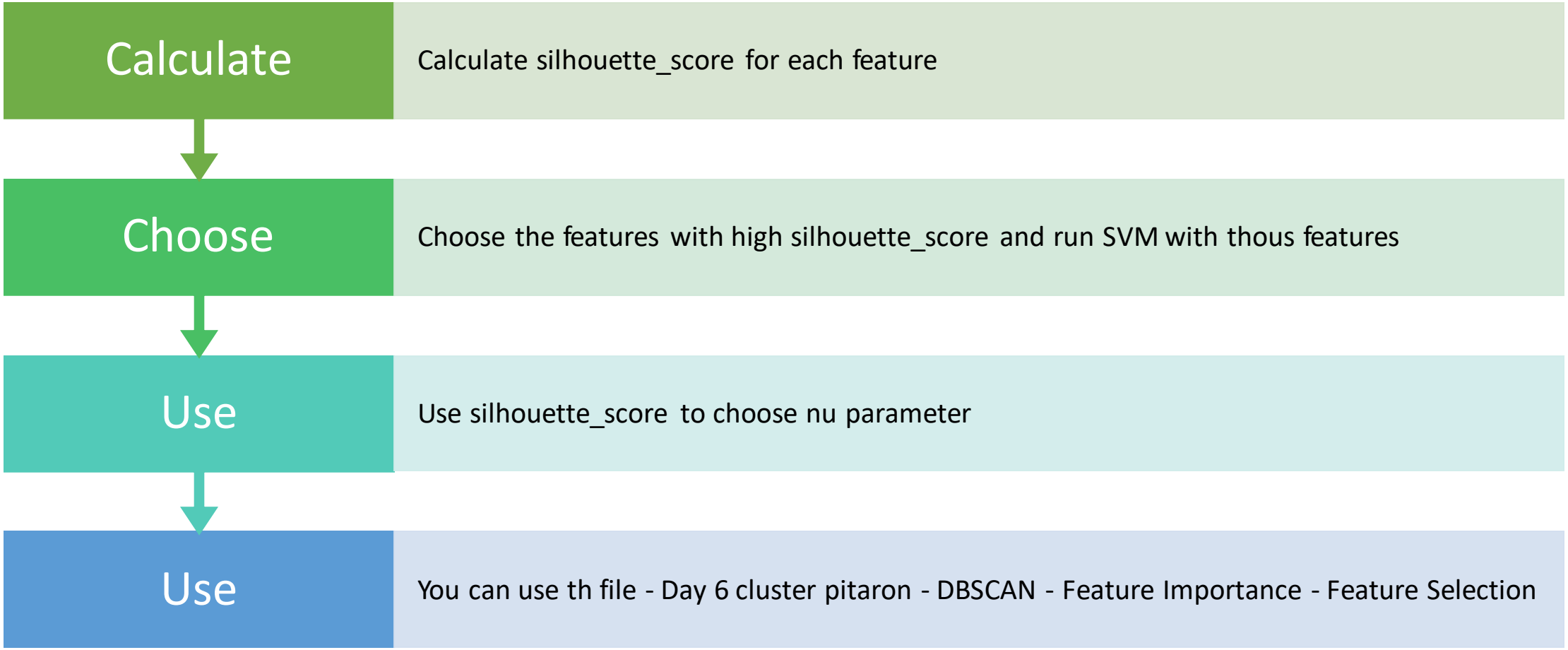
Select the value of eps to get a small group of less than 10 people

Exam the results, what makes each group unique.

Use https://www.encyclopedia-titanica.org/

**Do this exercise without scaling and with standart scaling**

# SVM


Calculate
Calculate silhouette_score for each feature
Choose
Choose the features with high silhouette_score and run SVM with thous features
Use
Use silhouette_score to choose nu parameter
Use
You can use th file - Day 6 cluster pitaron - DBSCAN - Feature Importance - Feature Selection

# Hierarchical Clustering

Plot dendrogram graph and choose threshold

Make cluster and exam the results