

Submission sheet

Assignment III

TASK 1: k-Means

Corresponds (more or less) to the three expected species? ☐ YES ☐ NO

No as there is only 1 sample in one cluster

Number of records in each cluster: 1) 2) 3)

TASK 2: preprocessing

Is it better to rescale before or after detecting and filtering out the outliers?

Corresponds (more or less) to the three expected species? ☐ YES ☐ NO -> Yes

Number of records in each cluster: 1) 2) 3)

Coordinates of the three centroids:

	PW	PL	SW	SL
1)	<input type="text" value="0.0566"/>	<input type="text" value="0.0652"/>	<input type="text" value="0.0847"/>	<input type="text" value="0.0784"/>
2)	<input type="text" value="0.066"/>	<input type="text" value="0.050"/>	<input type="text" value="0.0122"/>	<input type="text" value="0.0210"/>
3)	<input type="text" value="0.0528"/>	<input type="text" value="0.0608"/>	<input type="text" value="0.0559"/>	<input type="text" value="0.0626"/>

TASK 3: choice of k

Which K corresponds to the best clustering? (using the Davies-Boulding index).

TASK 4: Hierarchical clustering

Using SingleLink, how many records are included in each of the two top clusters?

Cluster 1:

Cluster 2:

Which approaches produce a (more or less) correct clustering corresponding to the three species, if any?

SingleLink:

CompleteLink:

AverageLink:

TASK 5: DB-Scan

How many clusters does DB-SCAN find with $\text{eps}=1$, $\text{min_samples}=5$?

1

Can you give a value for epsilon leading to two clusters (plus noise)?

0.02

K-DISTANCES:

Which K did you use?

5

According to the k-distances plot, what value(s) of epsilon would you consider as a parameter to DB-Scan and why?

From the k-distance plot, the "elbow" occurs at around 0.02