

Submission sheet
Assignment III

TASK 1: k-Means

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

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

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

Coordinates of the three centroids:

	PW	PL	SW	SL
1)	<input type="text" value="5.77"/>	<input type="text" value="3.04"/>	<input type="text" value="3.53"/>	<input type="text" value="1.18"/>
2)	<input type="text" value="5.76"/>	<input type="text" value="2.94"/>	<input type="text" value="3.74"/>	<input type="text" value="1.23"/>
3)	<input type="text" value="5.75"/>	<input type="text" value="3.05"/>	<input type="text" value="3.70"/>	<input type="text" value="1.27"/>

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)?

10000

K-DISTANCES:

Which K did you use?

7

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

The point where it changes drastically the k-distance plot since it indicates that transition from the points that are close together to points that are far away that represents the points in a different cluster