

**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"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**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  $\text{eps}=1$ ,  $\text{min\_samples}=5$ ?

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

K-DISTANCES:

Which K did you use?

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