Text Classification using Logistic Regression:

1. Data:

The data are attachment with these folders:

Training Data:

Folder: All-in-many/

Description: 117 articles (titles and abstract) of Volume 18 of Evolutionary Intelligence Journal.

Training Data Labeling:

Folder: All-in-many_classification/

Description: Four classes available :

1st class : Metaheuristics

2nd class : Machine & Deep Learning

3rd class : Combination of Metaheuristics & Machine/Deep Learning

4th class : Others

Testing Data:

Folder: All-in-many_classification_testing/

Description: 41 articles (titles and abstract) of Volumes 17 and 14 of Evolutionary Intelligence Journal with labels.

Attribute Data:

Folder: Attributes/

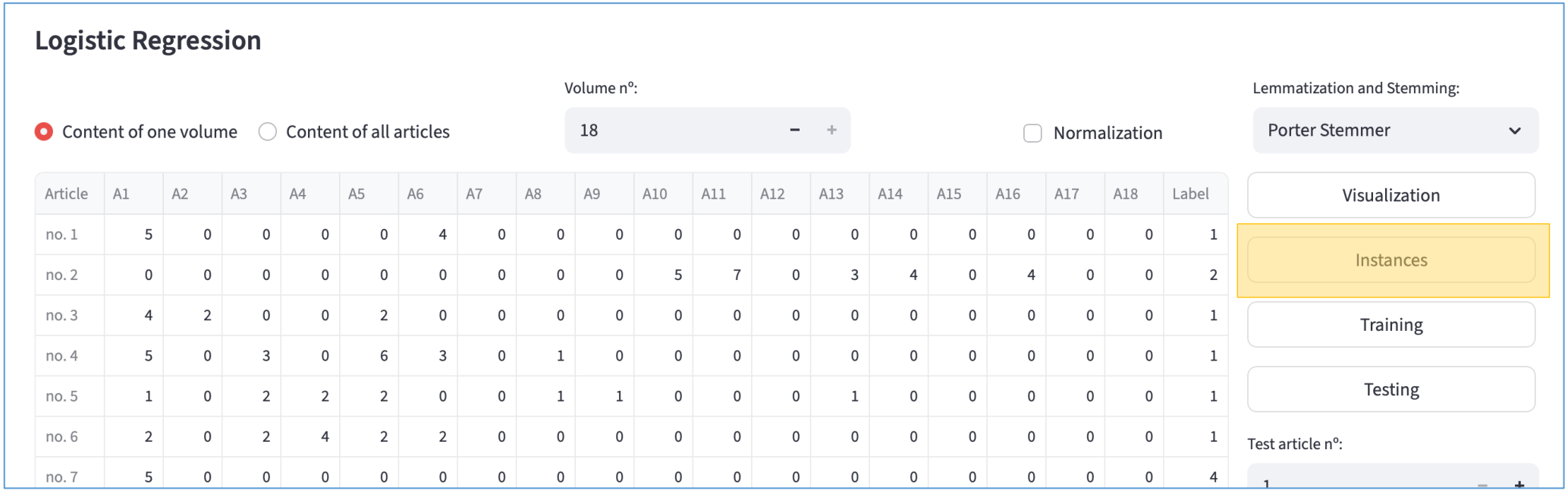
Description: This folder contains 18 attribute files. Each file includes a set of related word sequences.

2. Training Data as Instances :

- Each training article i is represented as an instance with 18 attributes (features). The value of attribute j corresponds to the number of occurrences of all word sequences listed in attribute file j within article i.
- The representation of each training instance, as well as the word sequences in the attribute files, must consider the chosen normalization method.

3. Implementation :

Representing training data as instances of 18 attributes (features)



Article	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	Label
no. 1	5	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	1
no. 2	0	0	0	0	0	0	0	0	0	5	7	0	3	4	0	4	0	0	2
no. 3	4	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1
no. 4	5	0	3	0	6	3	0	1	0	0	0	0	0	0	0	0	0	0	1
no. 5	1	0	2	2	2	0	0	1	1	0	0	0	1	0	0	0	0	0	1
no. 6	2	0	2	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1
no. 7	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4