

# Machine Learning Lab

## Date: 03.02.2026

Set up your environment and start the WEKA Explorer Preprocess, Classify, and Visualize panels

### 1. In Preprocess:

- load a dataset (weather.nominal) and look at it
- use the Data Set Editor
- apply a filter (to remove attributes and instances).

### 2. In Visualize:

- load a dataset (iris) and visualize it
- examine instance info
- (note discrepancy in numbering between instance info and dataset viewer)
- select instances and rectangles; save the new dataset to a file.

### 3. In Classify:

- load a dataset (weather, nominal) and classify it with the J48 decision tree learner (test on training set)
- examine the tree in the Classifier output panel
- visualize the tree (by right-clicking the entry in the result list)
- interpret classification accuracy and confusion matrix
- test the classifier on a supplied test set
- visualize classifier errors (by right-clicking the entry in the result list)

Instructions to be followed – Observation

1. Write description about WEKA tool.
2. Write the results u obtained
3. At the end, u should add some inference (what do u understand from the results u got)