

### Lab Assignment 3: Naive Bayes Classifier

Implement the Naive Bayes classifier using the IRIS and HEART(SPECT dataset) datasets.

Implement k-fold cross-validation with  $k=10$ . Compute the correctly classified instances, incorrectly classified instances; root mean squared error, relative absolute error, True positive rate, False positive rate, Confusion matrix and Kappa score. Display the evaluation metrics for each fold separately and then print all folds' final average evaluation metrics.

Please do not use built-in functions.

Please upload the

1. Screenshots of the code
2. Screenshots of the complete output and
3. The Python code of the assignment on Moodle is by 8/02/2024 EOD.

The physical evaluations will be conducted during the regular lab hours on 08/02/2024.

The output to be shown must include each of the datasets given.

**Dataset Link:** <https://data.world/uci/spect-heart>