

LAB ASSIGNMENT-6

Title: Apply different Machine Learning approach for the classification task. Compare the performance of different ML approaches in term of accuracy, precision and recall.

Objective: The objective of this lab assignment is to apply various Machine Learning (ML) approaches for a classification task and compare their performance in terms of accuracy, precision, and recall. You will gain hands-on experience in implementing and evaluating different ML algorithms, understanding their strengths and weaknesses, and interpreting their results.

1. Data Loading and Exploration
2. Data Preprocessing
3. Data Splitting
4. Model Training
5. Model Evaluation
6. Visualization, Comparison and Interpretation
7. Hyperparameter Tuning (Optional)

Bonus Tasks (Optional):

- Apply data normalization or feature scaling and observe its impact on the model's performance.
- Implement cross-validation to validate the model's robustness.