

## [README.md](#)

This project uses the Iris flower dataset to classify flowers into three species using:

- Decision Tree Classifier
- Logistic Regression

### Tools Used

Python, Pandas, NumPy, Matplotlib, Seaborn, Scikit-Learn

### Dataset

Columns: sepal\_length, sepal\_width, petal\_length, petal\_width, species

Total Samples: 150

### Steps

- Load dataset
- Remove ID column (if present)
- Detect target automatically
- Visualize (pairplot + heatmap)
- Train-test split (80–20)
- Train models
- Compare accuracy

### Results

Decision Tree: 100% accuracy

Logistic Regression: 96.6% accuracy