



Codveda Technologies Internship For ML Task 2: Decision Trees for Classification

Dataset-Iris.csv

Objectives:

Train a decision tree on a labeled dataset (e.g., the Iris dataset). Visualize the tree such as accuracy and F1-score. Tools: Python, scikit-learn, pandas, matplotlib. Des flowers).

```
[1]: #python libraries
import pandas as pd
import numpy as np
import seaborn as sns
from sklearn.model_selection import train_test_split #Model
from sklearn.tree import DecisionTreeClassifier, plot_tree
from sklearn.metrics import accuracy_score, f1_score, classification_r
import matplotlib.pyplot as plt
```

```
[2]: df=pd.read_csv(r"C:\Users\DELL\Downloads\iris.csv")
df
```

[2]:	sepal_length	sepal_width	petal_length	petal_width	species
0	5.1	3.5	1.4	0.2	setosa
1	4.9	3.0	1.4	0.2	setosa
2	4.7	3.2	1.3	0.2	setosa
3	4.6	3.1	1.5	0.2	setosa