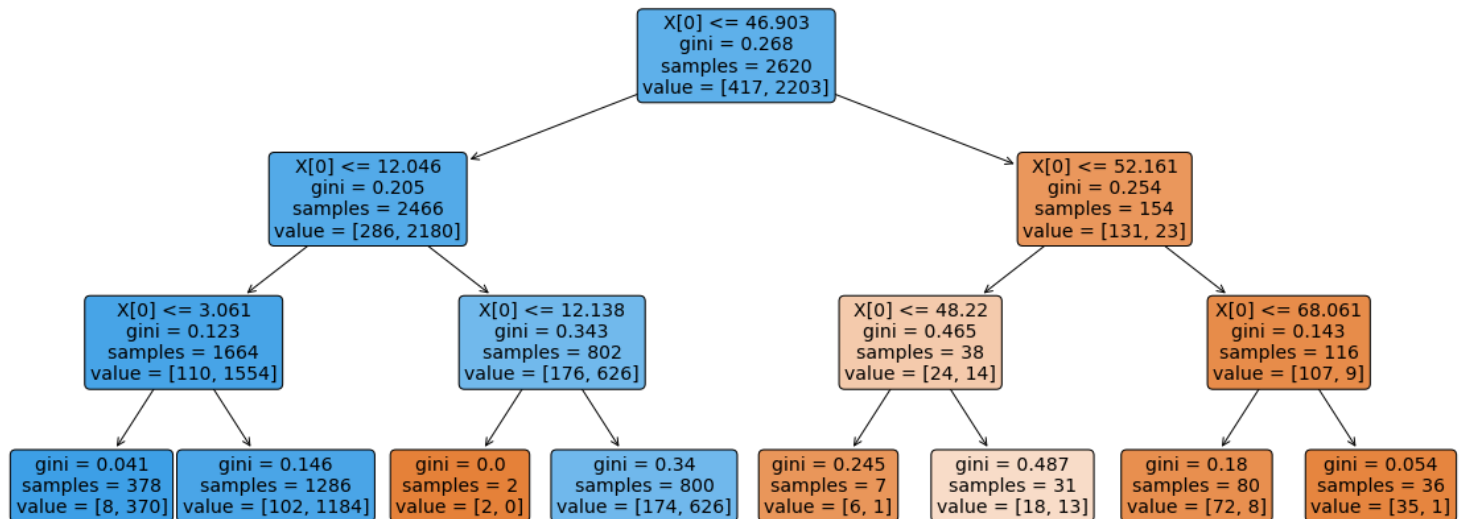


Exercise 1.2: Visualizing a Decision Tree

□□□ Visualizing a Decision Tree

The aim of this exercise is to visualize the decision tree that is created when performing Decision Tree Classification or Regression. The tree will look similar to the one given below.



Dataset Description

We are trying to predict the winner of the 2016 Presidential election (Trump vs. Clinton) in each county in the US. To do this, we will consider several predictors including `minority`: the percentage of residents that are minorities and `bachelor`: the percentage of resident adults with a bachelor's degree (or higher).

Instructions

- Read the datafile `county_election_train.csv` into a Pandas data frame.
- Create the response variable based on the columns `trump` and `clinton`.
- Initialize a Decision Tree classifier of depth 3 and fit on the training data.
- Visualise the Decision Tree.

Hints

```
sklearn.DecisionTreeClassifier()
```

Generates a Logistic Regression classifier.

```
classifier.fit()
```

Build a decision tree classifier from the training set (X, y).

```
plt.scatter()
```

A scatter plot of y vs. x with varying marker size and/or color.

```
plt.xlabel()
```

Set the label for the x-axis.

```
plt.ylabel()
```

Set the label for the y-axis.

```
plt.legend()
```

Place a legend on the Axes.

```
tree.plot_tree()
```

Plot a decision tree.

Note: This exercise is auto-graded and you can try multiple attempts.