DECISION TREE REGRESSION

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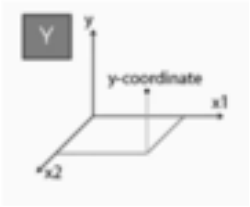
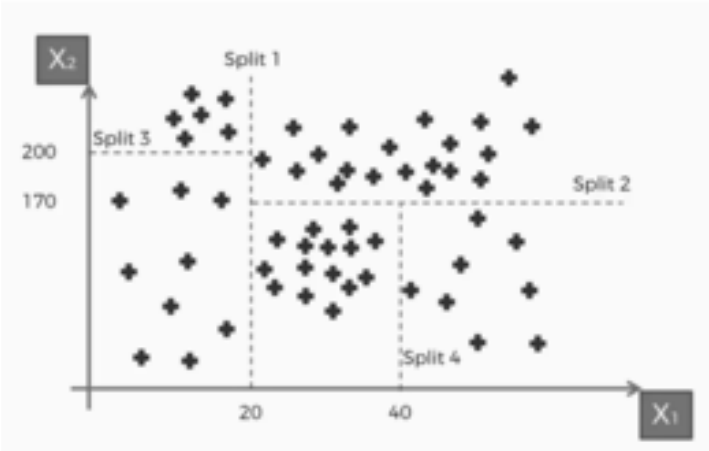
Introduction



Introduction



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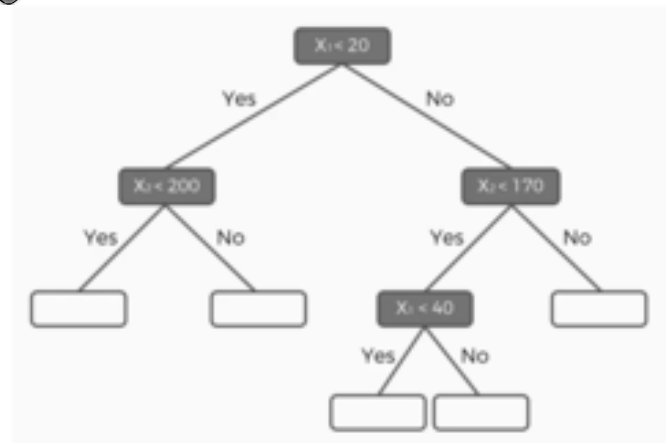

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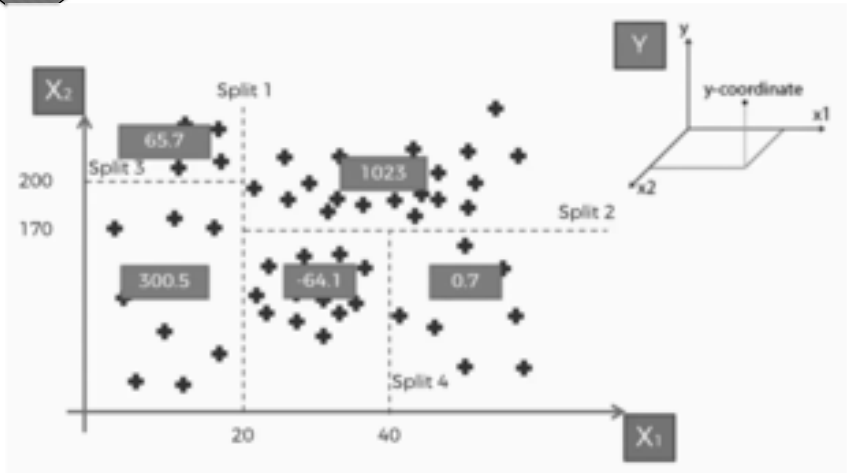


Introduction

Python Code:

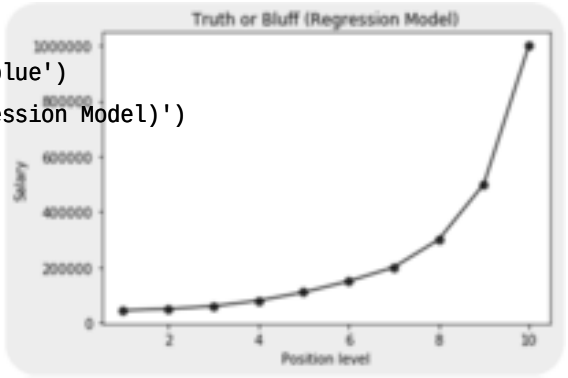
```
# Importing the libraries
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
# Importing the dataset
dataset = pd.read_csv('Position_Salaries.csv')
dataset
X = dataset.iloc[:, 1:2].values
y = dataset.iloc[:, 2].values
```

Python Code:

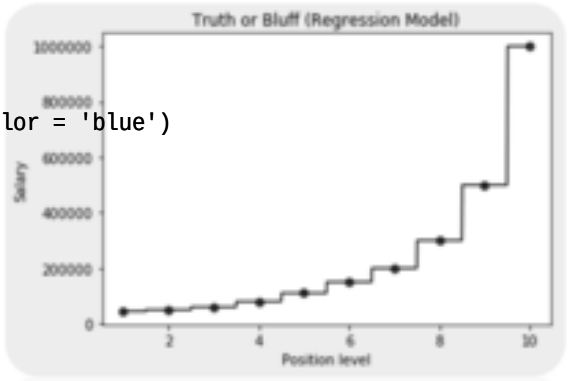
```
# Fitting the Regression Model to the dataset
from sklearn.tree import DecisionTreeRegressor
regressor = DecisionTreeRegressor(random_state=0)
regressor.fit(X,y)
# Predicting a new result
y_pred = regressor.predict(6.5)
y_pred
```

Python Code:

```
# Visualising the Regression results
plt.scatter(X, y, color = 'red')
plt.plot(X, regressor.predict(X), color = 'blue')
plt.title('Truth or Bluff (Decion Tree Regression Model)')
plt.xlabel('Position level')
plt.ylabel('Salary')
plt.show()
```




```
# Visualising the Regression results (for higher resolution and smoother curve)
X_grid = np.arange(min(X), max(X), 0.01)
X_grid = X_grid.reshape((len(X_grid), 1))
plt.scatter(X, y, color = 'red')
plt.plot(X_grid, regressor.predict(X_grid), color = 'blue')
plt.title('Truth or Bluff (Regression Model)')
plt.xlabel('Position level')
plt.ylabel('Salary')
plt.show()
```



THANK YOU