

## ▼ Random Forest Regression

### ▼ Importing the libraries

```
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
```

### ▼ Importing the dataset

```
dataset = pd.read_csv('wineq.csv')
X = dataset.iloc[:, :-1].values
y = dataset.iloc[:, -1].values
```

### ▼ Splitting the dataset into the Training set and Test set

```
from sklearn.model_selection import train_test_split
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size = 0.1, random_state
```

## ▼ Training the Random Forest Regression model on the training set

```
from sklearn.ensemble import RandomForestRegressor
regressor = RandomForestRegressor(n_estimators = 10, random_state = 0)
regressor.fit(X_train, y_train)
```

```
▼ RandomForestRegressor
RandomForestRegressor(n_estimators=10, random_state=0)
```

### ▼ Predicting the Test set results

```
y_pred = regressor.predict(X_test)
```

## \_ Error

```
from sklearn.metrics import mean_squared_error
mse = mean_squared_error(y_test, y_pred)
print(f"Mean Squared Error: {mse:.3f}")
```

Mean Squared Error: 0.098