

```
import pandas as pd
from sklearn.model_selection import train_test_split
from sklearn.tree import DecisionTreeRegressor
from sklearn.metrics import mean_squared_error, r2_score
import matplotlib.pyplot as plt

df = pd.read_csv('/content/drive/MyDrive/car_prices_dataset.csv')
print(df.head())
```

	Age (years)	Mileage (miles)	Price (dollars)
0	1	10000	20000
1	2	25000	18000
2	3	35000	15000
3	4	50000	13000
4	5	60000	10000

```
X = df[['Age (years)', 'Mileage (miles)']]
y = df['Price (dollars)']

X_train, X_test, y_train, y_test = train_test_split(X, y,
test_size=0.2, random_state=42)
```

```
dt_regressor = DecisionTreeRegressor(random_state=42)
dt_regressor.fit(X_train, y_train)
```

```
DecisionTreeRegressor(random_state=42)
```

```
y_pred = dt_regressor.predict(X_test)
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```
mse = mean_squared_error(y_test, y_pred)
r2 = r2_score(y_test, y_pred)
print(f'Mean Squared Error (MSE): {mse}')
print(f'R-squared (R2): {r2}')
```

```
Mean Squared Error (MSE): 5000000.0
R-squared (R2): 0.8979591836734694
```

```
plt.figure(figsize=(10, 8))
from sklearn.tree import plot_tree
plot_tree(dt_regressor, feature_names=X.columns, filled=True)
plt.title("Decision Tree Regression")
plt.show()
```

Decision Tree Regression

