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In [1]: #importing the libraries
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
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In [9]: #importing the dataset
dataset = pd.read_csv("D://anaapps//ML//Machine_Learning_AZ_Template_Folder//
Machine Learning A-Z Template Folder//Part 2 - Regression//Section 8 - Decisio
n Tree Regression//Decision_Tree_Regression//Position_Salaries.csv")
print(dataset.head())
X = dataset.iloc[:,1:2].values
print(X)
y = dataset.iloc[:,2].values
print(y)
```

	Position	Level	Salary
0	Business Analyst	1	45000
1	Junior Consultant	2	50000
2	Senior Consultant	3	60000
3	Manager	4	80000
4	Country Manager	5	110000

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[[ 1]
 [ 2]
 [ 3]
 [ 4]
 [ 5]
 [ 6]
 [ 7]
 [ 8]
 [ 9]
[10]]
[ 45000  50000  60000  80000 110000 150000 200000 300000 500000
1000000]
```

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In [10]: #fitting Decision Tree Regression to the Training Set
from sklearn.tree import DecisionTreeRegressor
regressor = DecisionTreeRegressor(random_state=0)
regressor.fit(X,y)
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Out[10]: DecisionTreeRegressor(criterion='mse', max_depth=None, max_features=None,
max_leaf_nodes=None, min_impurity_decrease=0.0,
min_impurity_split=None, min_samples_leaf=1,
min_samples_split=2, min_weight_fraction_leaf=0.0,
presort=False, random_state=0, splitter='best')
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In [21]: #predicting the Test Set results
y_pred = regressor.predict(6.5)
print(y_pred)
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[ 150000.]
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In [22]: #Visualising the Decision Tree Regression results (higher resolution)
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 (Decision Tree Regression)')
plt.xlabel('Position level')
plt.ylabel('Salary')
plt.show()
```

