In [1]:
```
#importing the libraries
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
```

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

In [3]:
```
#fitting RandomForest Tree Regression to the Training Set
from sklearn.ensemble import RandomForestRegressor
regressor =  RandomForestRegressor(n_estimators=300, random_state=0)
regressor.fit(X,y)
```

Out[3]:
```
RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=None,
           max_features='auto', 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, n_estimators=300, n_jobs=1,
           oob_score=False, random_state=0, verbose=0, warm_start=False)
```

In [4]:
```
#predicting the Test Set results
y_pred = regressor.predict(6.5)
print(y_pred)
```

```
[ 160333.33333333]
```

In [5]:
```
#Visualising the RandomForest 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()
```