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

In [2]:
```
dataset = pd.read_csv('Position_Salaries.csv')
x = dataset.iloc[:, 1:-1].values
y = dataset.iloc[:, -1].values
```

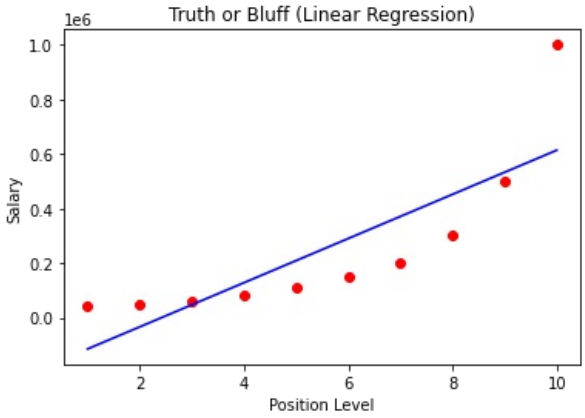
In [5]:
```
from sklearn.linear_model import LinearRegression
lin_reg = LinearRegression()
lin_reg.fit(x, y)
```

Out[5]:
```
LinearRegression()
```

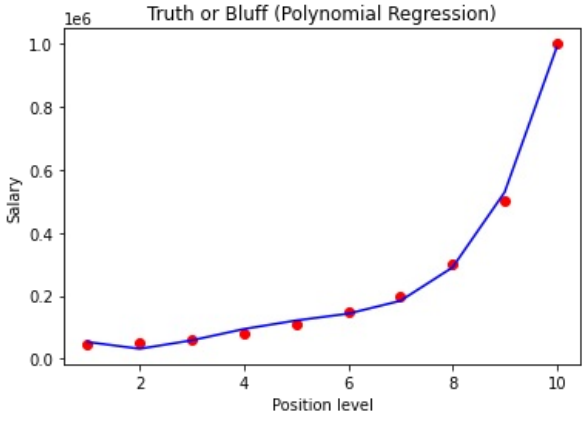
In [6]:
```
from sklearn.preprocessing import PolynomialFeatures
poly_reg=PolynomialFeatures(degree=4)
x_poly=poly_reg.fit_transform(x)
lin_reg_2=LinearRegression()
lin_reg_2.fit(x_poly,y)
```

Out[6]:
```
LinearRegression()
```

In [7]:
```
plt.scatter(x, y, color = 'red')
plt.plot(x, lin_reg.predict(x), color = 'blue')
plt.title('Truth or Bluff (Linear Regression)')
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()
```



In [8]:
```
plt.scatter(x, y, color = 'red')
plt.plot(x, lin_reg_2.predict(x_poly), color = 'blue')
plt.title('Truth or Bluff (Polynomial Regression)')
plt.xlabel('Position level')
plt.ylabel('Salary')
plt.show()
```



In [9]:
```
lin_reg.predict([[6.5]])
```

Out[9]:
```
array([330378.78787879])
```

In [10]:
```
lin_reg_2.predict(poly_reg.fit_transform([[6.5]]))
```

Out[10]:
```
array([158862.45265153])
```