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

# Importing the dataset
datas = pd.read_csv('data.csv')
datas
```

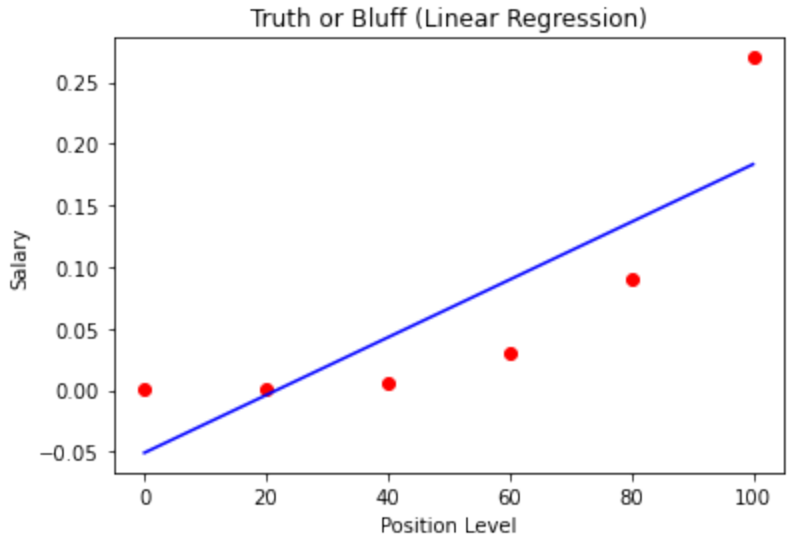
Out[1]:

	sno	Temperature	Pressure
0	1	0	0.0002
1	2	20	0.0012
2	3	40	0.0060
3	4	60	0.0300
4	5	80	0.0900
5	6	100	0.2700

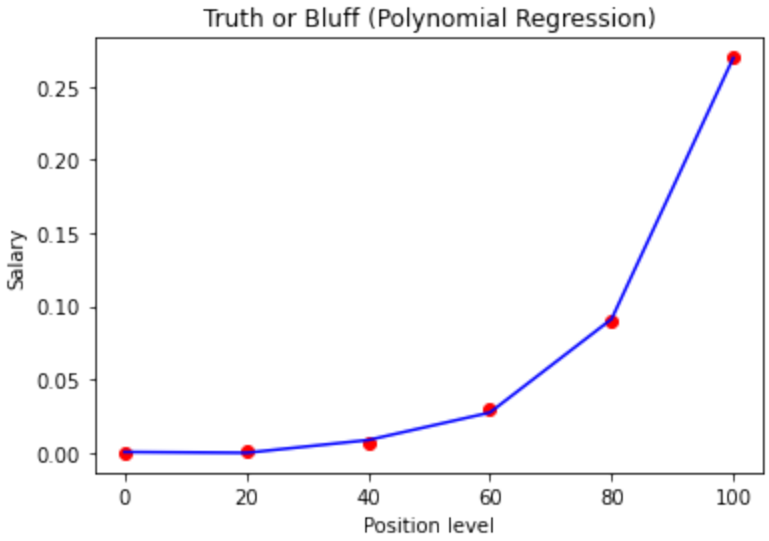
In [8]:
```
# Polynomial Regression

# Importing the libraries
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd

# Importing the dataset
dataset = pd.read_csv('data.csv')
X = dataset.iloc[:, 1:-1].values
y = dataset.iloc[:, -1].values

# Training the Linear Regression model on the whole dataset
from sklearn.linear_model import LinearRegression
lin_reg = LinearRegression()
lin_reg.fit(X, y)
```

Out[8]:
```
LinearRegression()
```

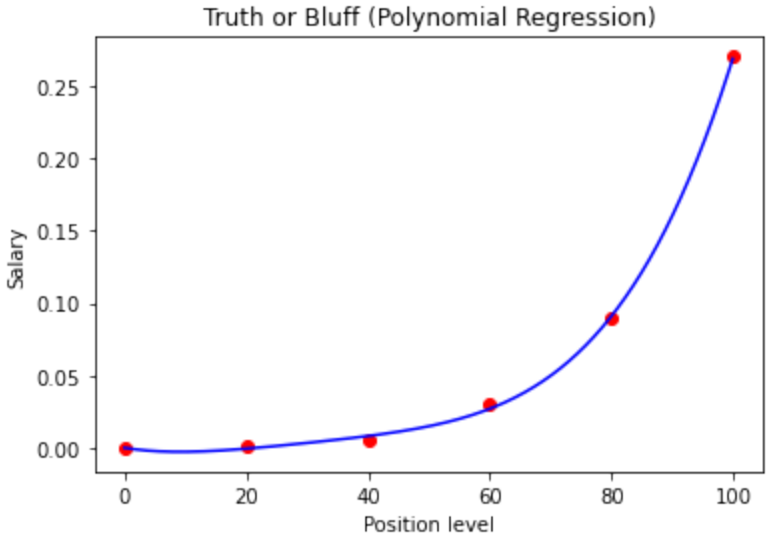
In [10]:
```
# Training the Polynomial Regression model on the whole dataset
from sklearn.preprocessing import PolynomialFeatures
poly_reg = PolynomialFeatures(degree = 4)
X_poly = poly_reg.fit_transform(X)
lin_reg_2 = LinearRegression()
lin_reg_2.fit(X_poly, y)

# Visualising the Linear Regression results
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 [11]:
```
# Visualising the Polynomial Regression results
plt.scatter(X, y, color = 'red')
plt.plot(X, lin_reg_2.predict(poly_reg.fit_transform(X)), color = 'blue')
plt.title('Truth or Bluff (Polynomial Regression)')
plt.xlabel('Position level')
plt.ylabel('Salary')
plt.show()
```



In [13]:
```
# Visualising the Polynomial Regression results (for higher resolution and smoo
X_grid = np.arange(min(X), max(X), 0.1)
X_grid = X_grid.reshape((len(X_grid), 1))
plt.scatter(X, y, color = 'red')
plt.plot(X_grid, lin_reg_2.predict(poly_reg.fit_transform(X_grid)), color = 'b
plt.title('Truth or Bluff (Polynomial Regression)')
plt.xlabel('Position level')
plt.ylabel('Salary')
plt.show()
```



In [14]:
```
# Predicting a new result with Linear Regression
lin_reg.predict([[6.5]])

# Predicting a new result with Polynomial Regression
lin_reg_2.predict(poly_reg.fit_transform([[6.5]]))
```

Out[14]:
```
array([-0.00209847])
```

In [ ]:
```

```