In [1]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import warnings
warnings.filterwarnings('ignore')
```

In [2]:
```
df = pd.read_csv("PolyData.csv",index_col=0)
df.head()
```

Out[2]:

	x	y
0	-0.216619	2.113105
1	2.945493	10.795516
2	-2.818077	4.346195
3	-1.641737	3.622927
4	0.200467	3.759674

In [3]:
```
x = df.iloc[:,0:1].values
y = df.iloc[:, 1].values
```

In [4]:
```
# Fitting Linear Regression to the Dataset
from sklearn.linear_model import LinearRegression
```

In [5]:
```
lin = LinearRegression()
```

In [6]:
```
lin.fit(x,y)
```

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

In [7]:
```
# Fitting Polynomial Regression to the dataset
from sklearn.preprocessing import PolynomialFeatures
```

In [8]:
```
poly = PolynomialFeatures(degree = 2)
```

In [9]:
```
x_poly = poly.fit_transform(x)
```

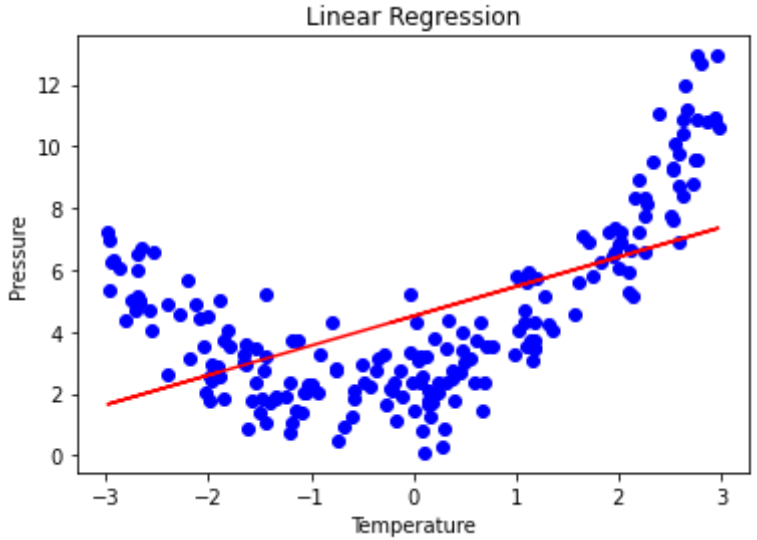
In [10]:
```
poly.fit(x_poly, y)
```

Out[10]:
```
PolynomialFeatures()
```

In [11]:
```
lin2 = LinearRegression()
lin2.fit(x_poly, y)
```

Out[11]:
```
LinearRegression()
```

In [12]:
```
# Visualize the Linear Regression results
plt.scatter(x, y, color='blue')
plt.plot(x, lin.predict(x), color='r')
plt.title('Linear Regression')
plt.xlabel('Temperature')
plt.ylabel('Pressure')
plt.show()
```



In [13]:
```
# Visualising the Polynomial Regression results
plt.scatter(x, y, color = 'blue')

plt.plot(x, lin2.predict(poly.fit_transform(x)), color = 'red')
plt.title('Polynomial Regression')
plt.xlabel('Temperature')
plt.ylabel('Pressure')

plt.show()
```