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

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

In [3]:
```
df
```

Out[3]:

	Unnamed: 0	x	y
0	0	-0.216619	2.113105
1	1	2.945493	10.795517
2	2	-2.818077	4.346195
3	3	-1.641737	3.622927
4	4	0.200467	3.759674
...	...	...	...
195	195	0.057998	2.350656
196	196	-2.936630	6.285578
197	197	2.644792	11.962454
198	198	2.009540	6.082032
199	199	-1.916395	2.883002

200 rows × 3 columns

In [11]:
```
x1 = df.iloc[:, 1:2].values
y1 = df.iloc[:, 2].values
```

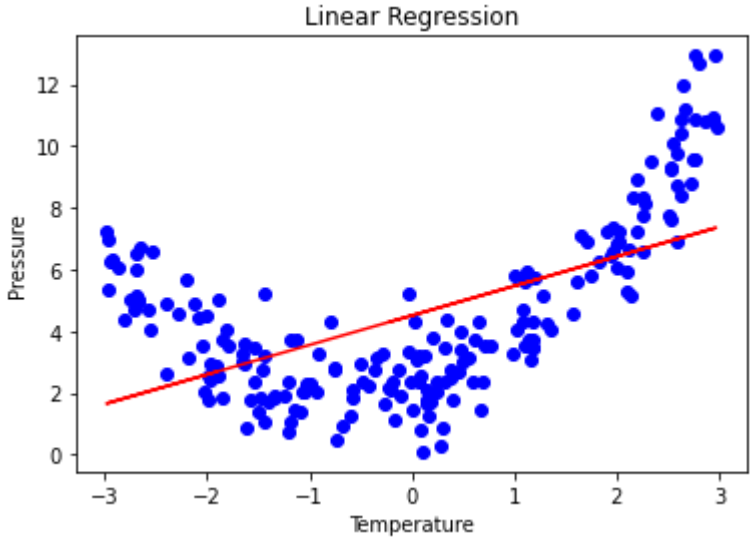
In [12]:
```
from sklearn.linear_model import LinearRegression
lin = LinearRegression()

lin.fit(x1, y1)
```

Out[12]:
```
LinearRegression()
```

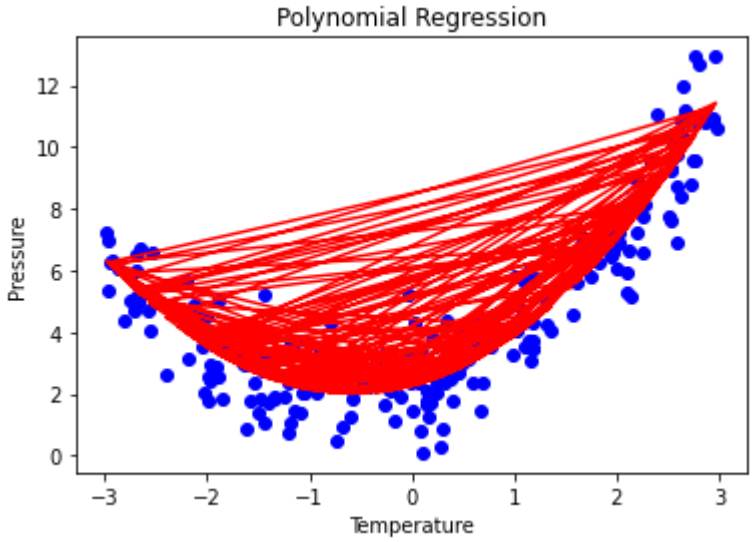
In [13]:
```
from sklearn.preprocessing import PolynomialFeatures

poly = PolynomialFeatures(degree = 2)
x1_poly = poly.fit_transform(x1)

poly.fit(x1_poly, y1)
lin2 = LinearRegression()
lin2.fit(x1_poly, y1)
```

Out[13]:
```
LinearRegression()
```

In [14]:
```
plt.scatter(x1, y1, color = 'blue')

plt.plot(x1, lin.predict(x1), color = 'red')
plt.title('Linear Regression')
plt.xlabel('Temperature')
plt.ylabel('Pressure')

plt.show()
```



In [15]:
```
plt.scatter(x1, y1, color = 'blue')

plt.plot(x1, lin2.predict(poly.fit_transform(x1)), color = 'red')
plt.title('Polynomial Regression')
plt.xlabel('Temperature')
plt.ylabel('Pressure')

plt.show()
```



In [ ]:
```
```