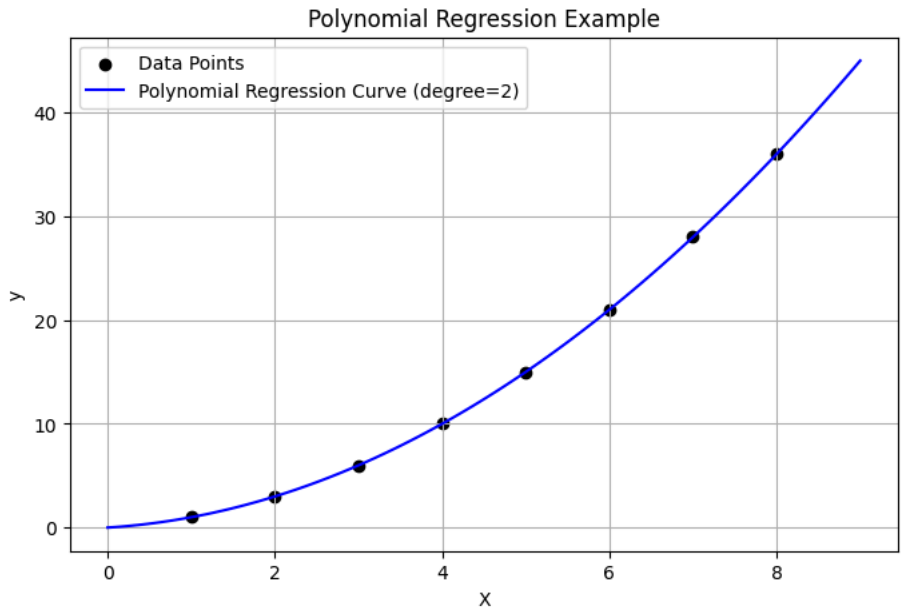
```
import numpy as np
import matplotlib.pyplot as plt
from sklearn.preprocessing import PolynomialFeatures
from sklearn.linear_model import LinearRegression


X = np.array([[1], [2], [3], [4], [5], [6], [7], [8]])
y = np.array([1, 3, 6, 10, 15, 21, 28, 36])

poly = PolynomialFeatures(degree=2)
X_poly = poly.fit_transform(X)

model = LinearRegression()
model.fit(X_poly, y)

X_test = np.linspace(0, 9, 100).reshape(-1, 1)
X_test_poly = poly.transform(X_test)
y_pred = model.predict(X_test_poly)

plt.figure(figsize=(8, 5))
plt.scatter(X, y, color='black', label="Data Points")
plt.plot(X_test, y_pred, color='blue', label="Polynomial Regression Curve (degree=2)")
plt.title("Polynomial Regression Example")
plt.xlabel("X")
plt.ylabel("y")
plt.grid(True)
plt.legend()
plt.show()
```



Start coding or generate with AI.