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# 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('task2.csv')
X = dataset.iloc[:, 2:3].values
y = dataset.iloc[:, 3].values

# Splitting the dataset into the Training set and Test set
"""from sklearn.cross_validation import train_test_split
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size = 0.2, random

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plt.title('Headsize Vs BrainWeight(Polynomial Regression)')
plt.xlabel('Head Size')
plt.ylabel('Brain Weight')
plt.show()

# Visualising the Polynomial Regression results (for higher resolution and smooth
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 = 'blue')
plt.title('Headsize Vs BrainWeight(Polynomial Regression)')
plt.xlabel('Head Size')
plt.ylabel('Brain Weight')
plt.show()

# 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]]))

```

