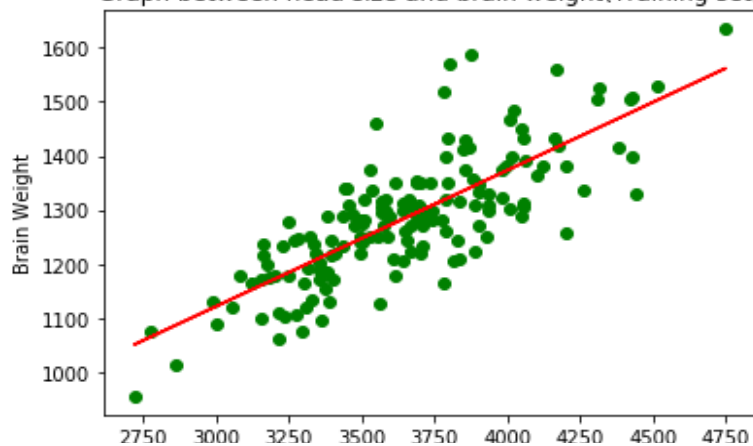


CODE:

```
Editor - C:\Users\Ali\Desktop\Machine Learning\1 - Simple Linear Regression\New folder\simple_linear_regression.py
temp.py x simple_linear_regression.py x
2
3 # Importing the libraries
4 import numpy as np
5 import matplotlib.pyplot as plt
6 import pandas as pd
7
8 # Importing the dataset
9 dataset = pd.read_csv('dataset.csv')
10 X = dataset.iloc[:, 2:3].values
11 y = dataset.iloc[:, 3].values
12
13 # Splitting the dataset into the Training set and Test set
14 from sklearn.model_selection import train_test_split
15 X_train, X_test, y_train, y_test = train_test_split(X, y, test_size = 1/3, random_state = 0)
16
17 # Fitting Simple Linear Regression to the Training set
18 from sklearn.linear_model import LinearRegression
19 regressor = LinearRegression()
20 regressor.fit(X_train, y_train)
21
22 # Predicting the Test set results
23 y_pred = regressor.predict(X_test)
24
25 # Visualising the Training set results
26 plt.scatter(X_train, y_train, color = 'green')
27 plt.plot(X_train, regressor.predict(X_train), color = 'red')
28 plt.title('Graph between head size and brain weight(Training set)')
29 plt.xlabel('Head Size')
30 plt.ylabel('Brain Weight')
31 plt.show()
32
33 # Visualising the Test set results
34 plt.scatter(X_test, y_test, color = 'green')
35 plt.plot(X_train, regressor.predict(X_train), color = 'red')
36 plt.title('Graph between head size and brain weight (Test set)')
37 plt.xlabel('Head Size')
38 plt.ylabel('Brain Weight')
39 plt.show()
```

| Variable explorer | | | |
|-------------------|-----------|----------|--|
| Name | Type | Size | Value |
| X | int64 | (237, 1) | [[4512] [3738] |
| X_test | int64 | (79, 1) | [[3724] [3680] |
| X_train | int64 | (158, 1) | [[3777] [3302] |
| dataset | DataFrame | (237, 4) | Column names: Gender, Age Range, Head Size(cm^3), Brain Weight(grams) |
| y | int64 | (237,) | [1530 1297 1335 ... 1104 1170 1120] |
| y_pred | float64 | (79,) | [1303.83322923 1292.73537163 1381.5182324 ... 1105.3329127 1363.8625 ...] |
| y_test | int64 | (79,) | [1280 1321 1425 ... 1070 1350 1522] |
| y_train | int64 | (158,) | [1282 1165 1635 ... 1270 1215 1316] |

Graph between head size and brain weight(Training set)



Graph between head size and brain weight (Test set)

