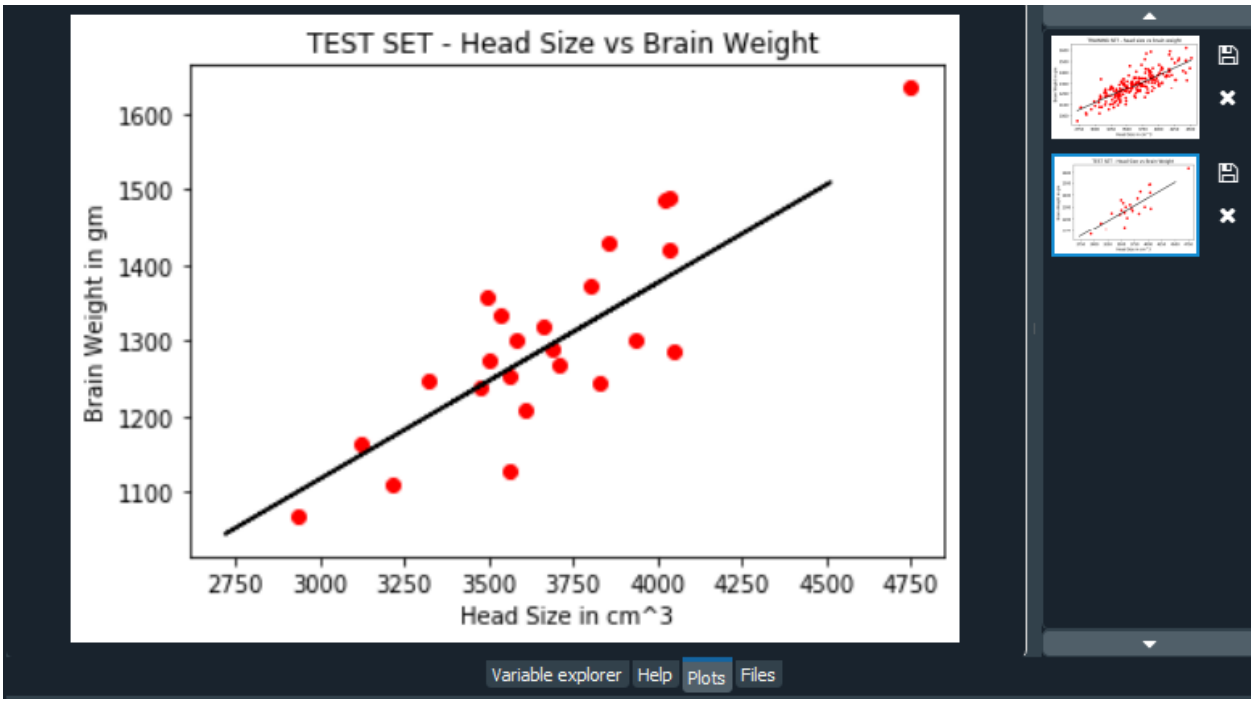
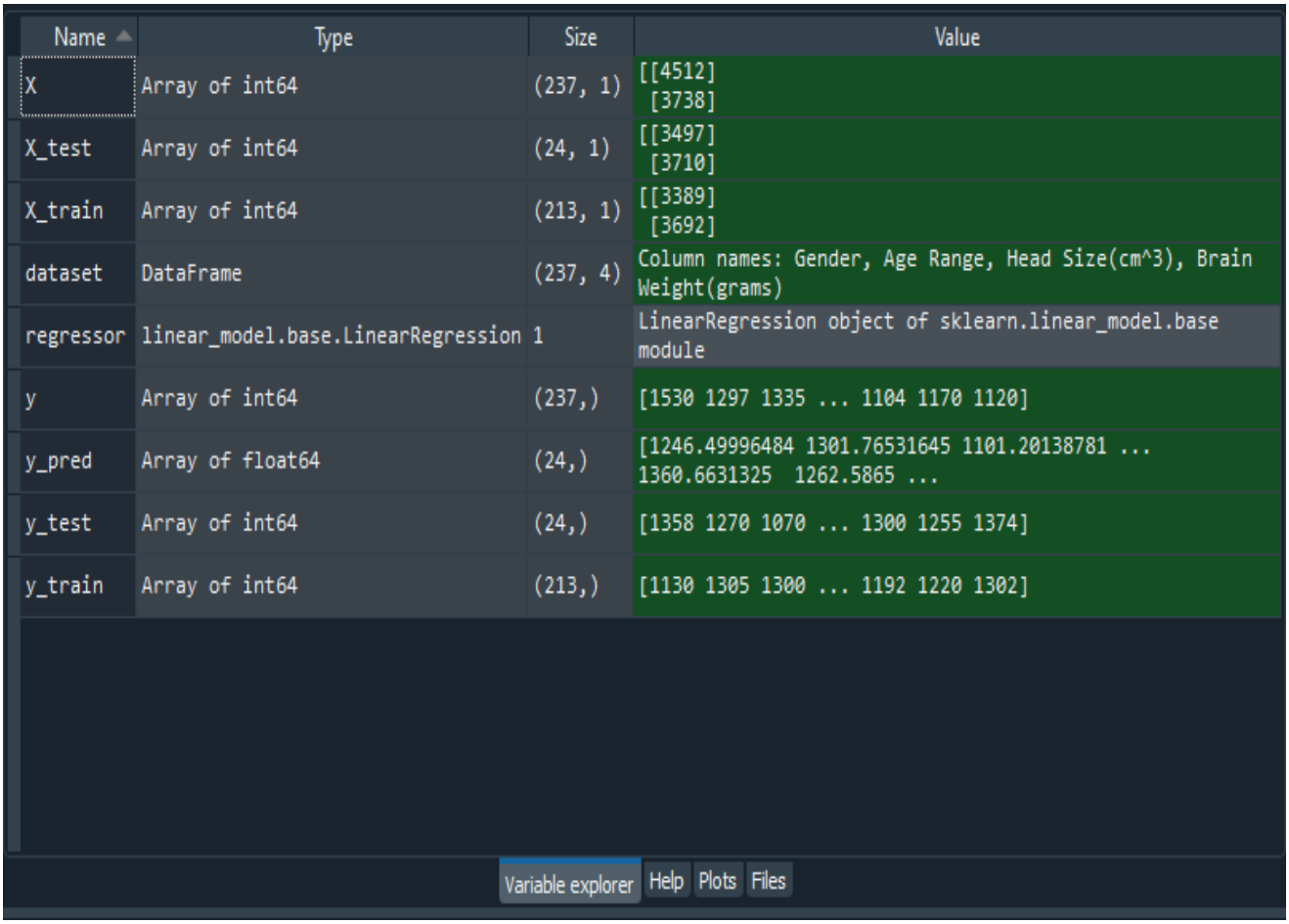
Users\Tasmiya Anwer\Desktop\ml\Assignemnt-2-batch-3-master\Assignemnt-2-batch-3-master\assignment.py

assignment.py*

```
# Importing libraries
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd

# Importing the dataset
dataset = pd.read_csv('C:/Users/Tasmiya Anwer/Desktop/ml/Assignemnt-2-batch-3-master/size of heaad.csv')
X = dataset.iloc[:, 2:3].values
y = dataset.iloc[:, 3].values

# Splitting the dataset into the Training set and Test set
from sklearn.model_selection import train_test_split
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size = 0.1)

# Fitting Linear Regression to the Training set
from sklearn.linear_model import LinearRegression
regressor = LinearRegression()
regressor.fit(X_train, y_train)

# Predicting the Test set results
y_pred = regressor.predict(X_test)

# maping the Training set results
plt.scatter(X_train, y_train, color = 'red')
plt.plot(X_train, regressor.predict(X_train), color = 'black')
plt.title('TRAINING SET - head size vs brain weight')
plt.xlabel('Head Size in cm^3')
plt.ylabel('Brain Weight in gm')
plt.show()

#maping the Test set results
plt.scatter(X_test, y_test, color = 'red')
plt.plot(X_train, regressor.predict(X_train), color = 'black')
plt.title('TEST SET - Head Size vs Brain Weight ')
plt.xlabel('Head Size in cm^3')
plt.ylabel('Brain Weight in gm')
plt.show()
```

TRAINING SET - head size vs brain weight
Brain Weight in gm
Head Size in cm^3
1600
1500
1400
1300
1200
1100
1000
2750
3000
3250
3500
3750
4000
4250
4500
Variable explorer
Help
Plots
Files


TEST SET - Head Size vs Brain Weight
Brain Weight in gm
Head Size in cm^3
1600
1500
1400
1300
1200
1100
2750
3000
3250
3500
3750
4000
4250
4500
4750
Variable explorer
Help
Plots
Files



Name	Type	Size	Value
X	Array of int64	(237, 1)	[[4512] [3738]
X_test	Array of int64	(24, 1)	[[3497] [3710]
X_train	Array of int64	(213, 1)	[[3389] [3692]
dataset	DataFrame	(237, 4)	Column names: Gender, Age Range, Head Size(cm^3), Brain Weight(grams)
regressor	linear_model.base.LinearRegression	1	LinearRegression object of sklearn.linear_model.base module
y	Array of int64	(237,)	[1530 1297 1335 ... 1104 1170 1120]
y_pred	Array of float64	(24,)	[1246.49996484 1301.76531645 1101.20138781 ... 1360.6631325 1262.5865 ...
y_test	Array of int64	(24,)	[1358 1270 1070 ... 1300 1255 1374]
y_train	Array of int64	(213,)	[1130 1305 1300 ... 1192 1220 1302]

Variable explorer | Help | Plots | Files