

```

12 datasetwpd.read_csv(path "headbrotn.csv")
13 print (dataset.head ())
14 x=dataset( "Nead stze(ca^3)" ].values
15 y=dataset( "Brotn Nelght (grams)" ).values
16 mean_x=np.mean(x)
17 mean_y=np.mean(y)
18 numer=0
19 denom
20 for i in range(len(x)):
21     numer +=(x[i]-mean_x)*(y[i]-mean_y)
22     denom +=(x[i]-mean_x)**2
23 -numer/denom
24 Cmean_y=(a*mean_x)
25 max_x=np.max (x)+100
26 min_x=np.min(x)-100
l=np.linspace(min_x,max_x,N, 100)

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23         Unerldenom
24 Clean y- (0i½mean x)
25         ax_Xnp.max(x)+100
           min xnp.in(x)-100
27         Anp.linspace (min_K,nax_X100)
28 y1-( a)

30     ""volute=tnt((nput('Insert the head stze tn ^3:"))
31     predtct-(0i½volute)ec
32     print (predict)'"
33
34     i½plt,plot(K1, y1, olor58b970, label= "RegressionLine')
           plt.scatter(x,y, c'efS423', label-'dataponts")

36
37
38         ss_t0
39         $s_0
40
43     for l tn range(len(x)):
42         v Ored c

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plt

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C:\Users User Documents aiml

110

C:\Users User Documents\aiml head size.py

untitled8.py x head size.py x

```

import pandas as pd
import matplotlib.pyplot as plt
import numpy as np

path= "C:/Users/User/Downloads /headbrain. csv"
dataset=pd. readcsv(path)

x=dataset[ "Head Size(cm^3)*1. values
y=dataset[ "Brain Weight(grams)"].values

mean_x=np.mean (x)
mean_y=np.mean(y)

numer=
denom=0

for i in range(len(x)):
    numert= (x[i]-mean_x)*(y[i]-mean_y)
    denomt= (x[i]-mean x)**2

m=numer/denom # y' c + mx
C= mean y - m*mean_x

max_ x=np.max(x)+100
min_x=np.min(x)-100

xl=np.linspace(max_X, min_x,100)
yl=n*xl + c

plt.plot (xl,yl, label="Regression Line")
plt.scatter(x,Y, c= 'r', label="data points")

value=int (input ("Enter head size (ca^3): ")
print("Brain weight (g):", m*value+c)

```

1600

1500

1400

1800

1200

1100

1000

3000

3500

4000

4500

Help

Variable Explorer

Plots

Files

Code

Analysis

Console 1/A

In [11]: runfile('C:/Users/User/Documents/aiml/head size.py', wdir='C:/Users/User/Documents/aiml')

In [12]: runfile('C:JUsers /User/Documents/aim/head size.py', dir='C:/Users/User/Documents/aiml')

In [13]: runfile('C:/Users/User/Documents/aiml/head size.py', wdir='C:/Users/User/Documents/aiml')

Enter head size (cm^3): 3490

Brain weight (g): 1244.9418158674462

In [14]:|

IPython Console History

conda (Python 3.115)Compleions:conda LSP: python Line 34, Col 36 UTF-8 CRIF RW Mem 49%