

Linear Regression

Artificial Intelligence Project



Trends in our body

Brain weight to body weight



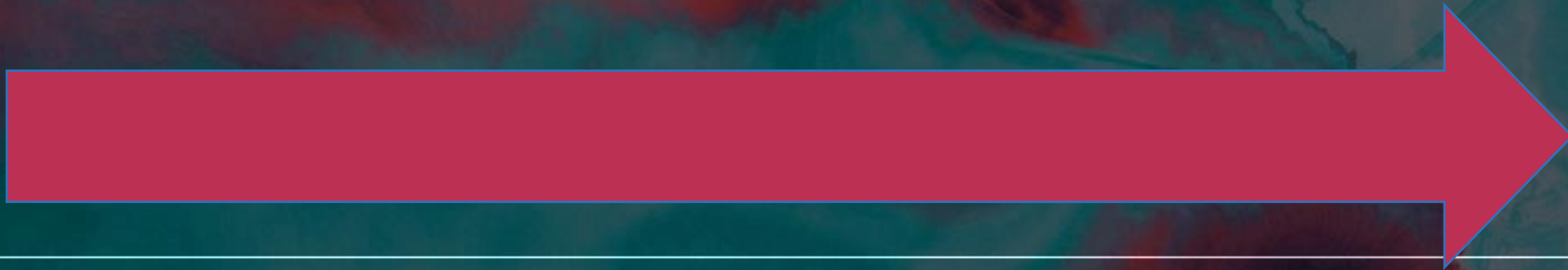
Data of Body weight and Brain weight

As per datasheet

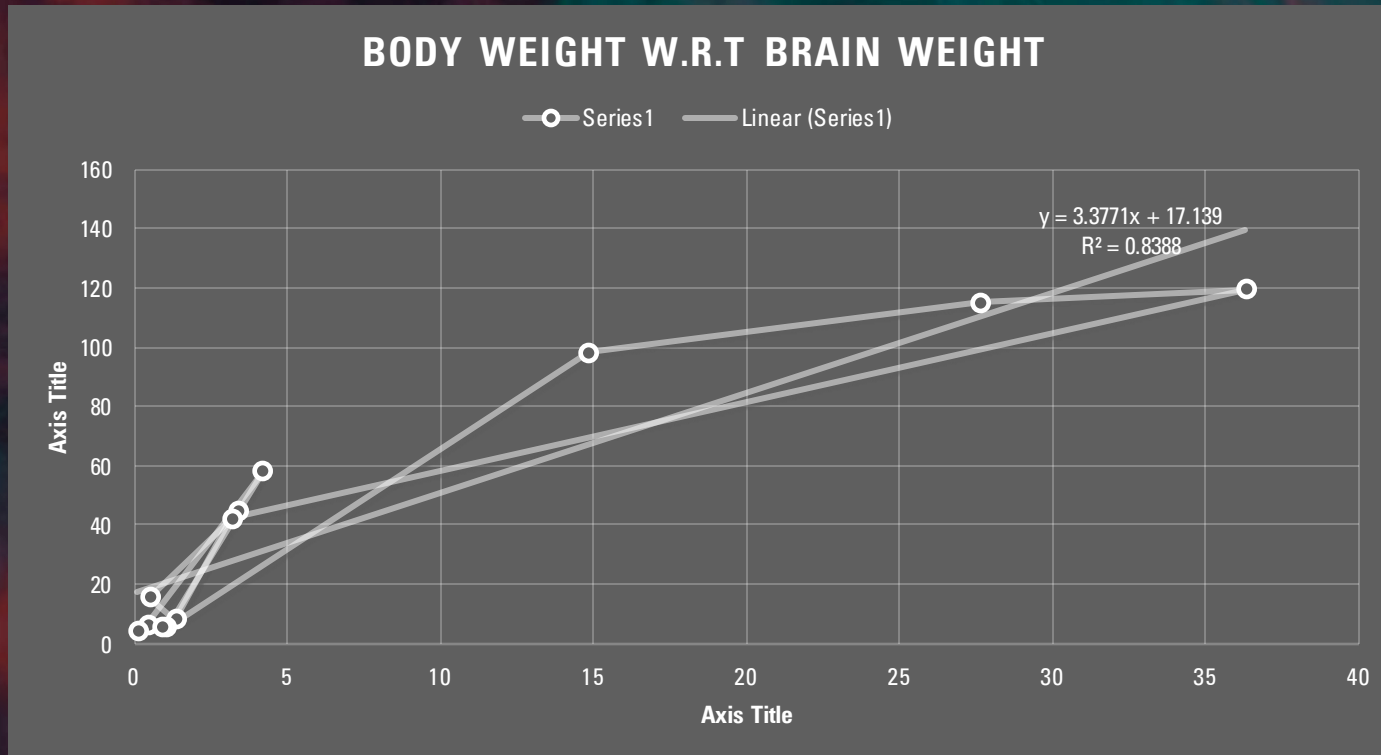
Index	Brain Weight	Body Weight
1	3.385	44.5
2	0.48	15.5
3	1.35	8.1
4	465	423
5	36.33	119.5
6	27.66	115
7	14.83	98.2
8	1.04	5.5
9	4.19	58
10	0.425	6.4
11	0.101	4
12	0.92	5.7

Objective

To Find Brain weight for a person weighing
100 kg



STEP- 1 Plotting the graph



$$Y = mx + c$$

Linear Regression Formula

List of Values

Using Linear Regression we got the following values:-

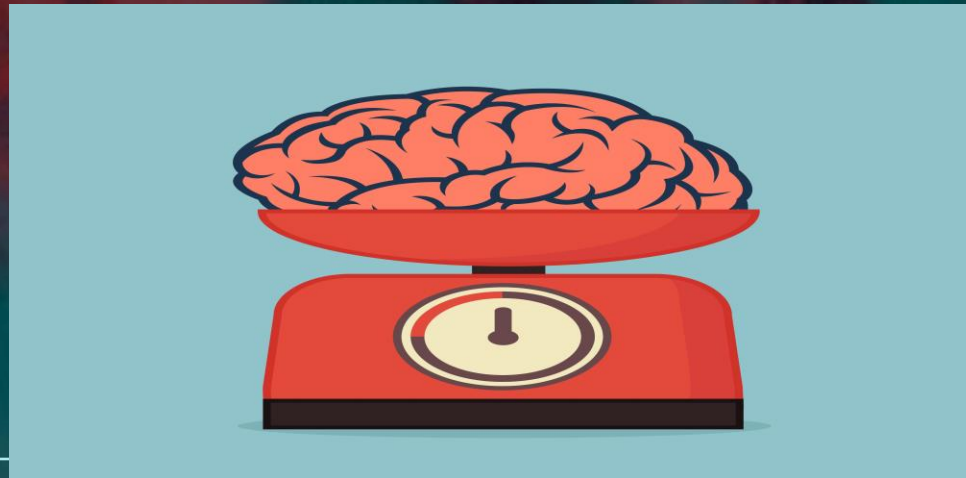
- $m(\text{slope})=3.3771$
- $c(\text{y-intercept})=17.139$
- y stands for dependent variable
- x stands for independent variable

STEP-2

Predicting required value

By using Linear Regression we can predict the weight of someone with a Brain weighing 50 kg(hypothetical) :---

- $3.3771 * 50 + 17.139 = 185.554 \text{ Kg}$



Thanks For Watching!

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