

Please implement 3 linear regression models: **Simple**, **Multiple**, and **Polynomial**

1.Simple Linear Regression

You have attached dataset titled **Salaries-Simple_Linear.csv** contains two columns: Years of Expertise and Salary.

Your task is to create a model with the best fitting line that enables to estimate new salaries (y's) based on the years of experience (x's) to new hire employees using simple linear regression techniques!

2.Multiple Linear Regression

You have attached dataset titled **3-Products-Multiple.csv** contains four columns: Product 1, Product 2, Product 3, Location, and Profit.

Your task is to build a model using Multiple Linear Regression technique that tells what factors (x's) that affect profitability of a business. For example, investing more in the Product_1, Product_2, or Product_3 at a certain city (x's) to maximize the profit (y's)?

So, you have four features (Product_1, Product_2, Product_3, Location) will help you to build your model to predict the better profit could be obtained by investing more on a specific product at a particular city! You have two options here to create your model that are:

- 2 input features (Product_3 and Location); 1 output represents the estimate profit based on these two features.
- 2 input features (Product_1 and Product_3); 1 output represents the estimate profit based on these two features.

3.Polynomial Regression

You have attached dataset titled **Propose-Salaries-Polynomial.csv** contains three columns: Position, Level, and Salary.

Your task is to build a model with the best representation to our datasets that enables to estimate new salaries (y's) based on the levels to new hire employees using the polynomial regression technique! Please assume that the level represents the position code (x's), so you don't need to use the position field during building your model! I want to find the estimate salary to a new hire employee at level 6.5!