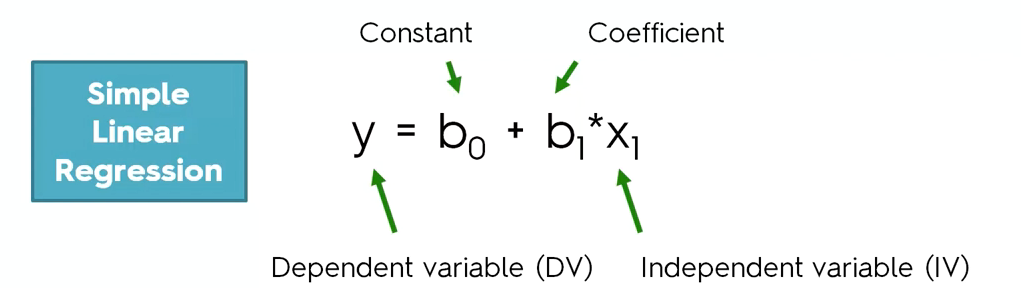
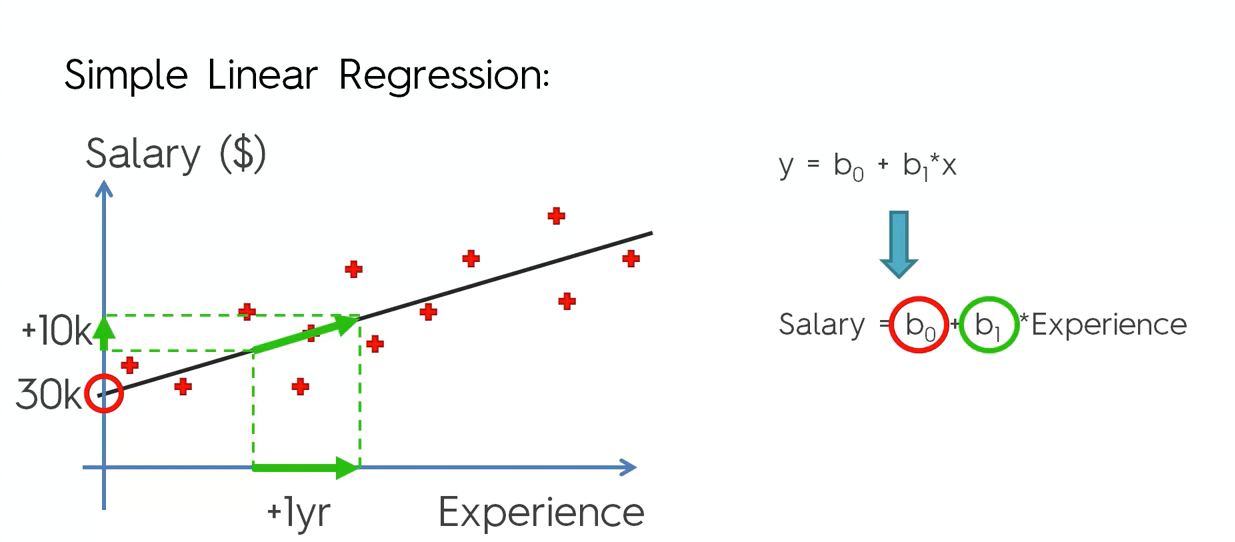
Regression

**Simple Linear Regression:**

It is like a formula of a slope

Eg scenario: how does a **salary** (Dependent) changes with **years of experience** (Independent Variable)

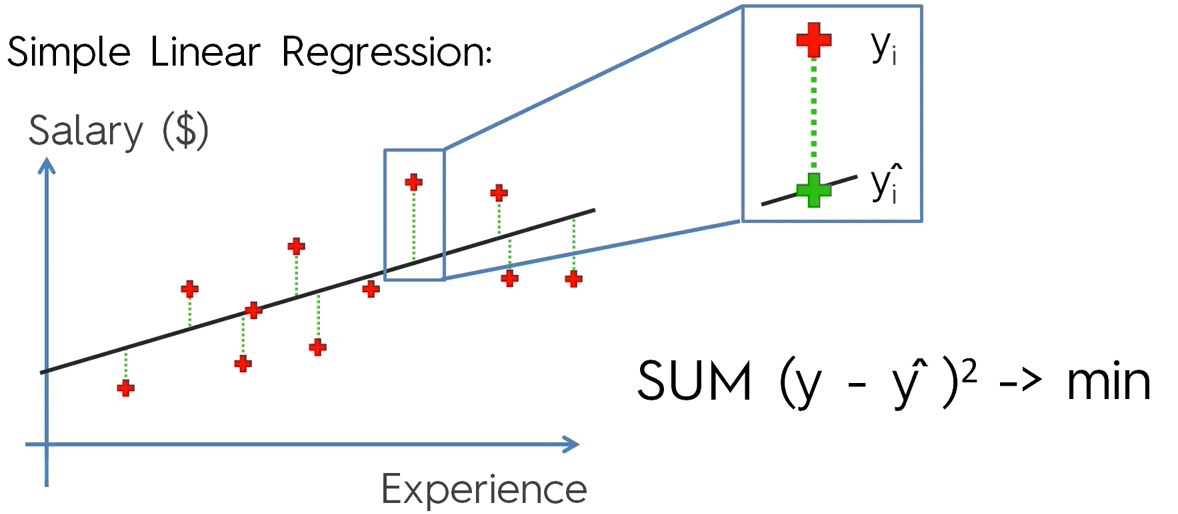
Coefficient🡪 Unit change in independent Variable (like multiplier🡪connection between x1 and y)



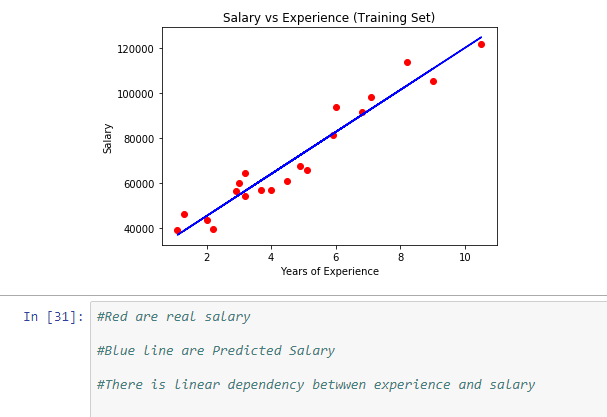
b0🡪Constant (30,000$)

b1🡪Coefficient (+10,000$ for 1 year)

1. How to find the best fitting line(line in the graph)



**Example**



Correlation🡪The correlation coefficient is a **statistical measure** that calculates the strength of the relationship between the relative movements of the two variables

It measures the strength (qualitatively) and direction of the **linear** relationship between two or more variables. The Pearson correlation coefficient measures the strength of the **linear** association between two variables