

Linear Regression

$$y = b_0 + b_1 * x_1$$

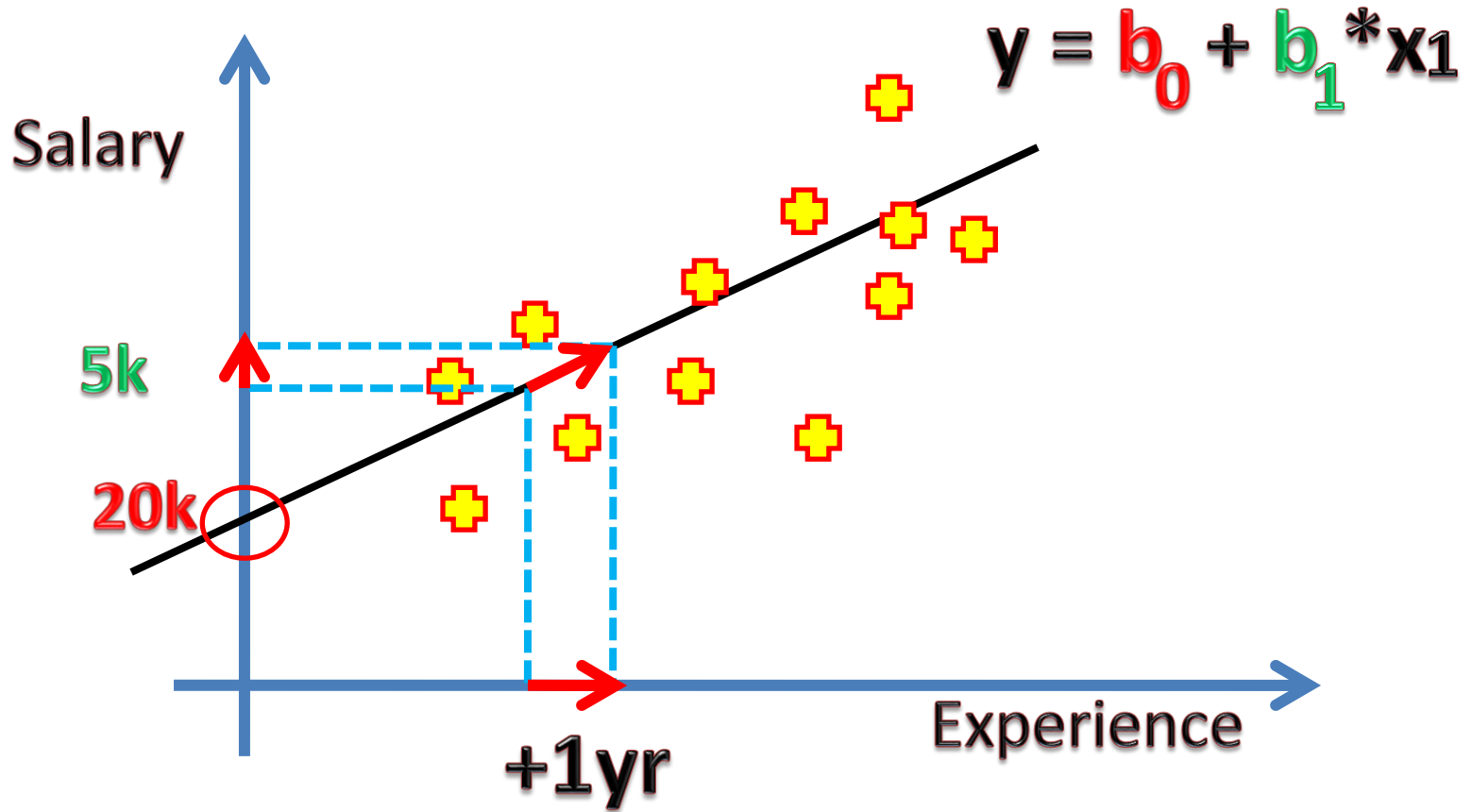
y is the dependent variable

x1 is independent variable

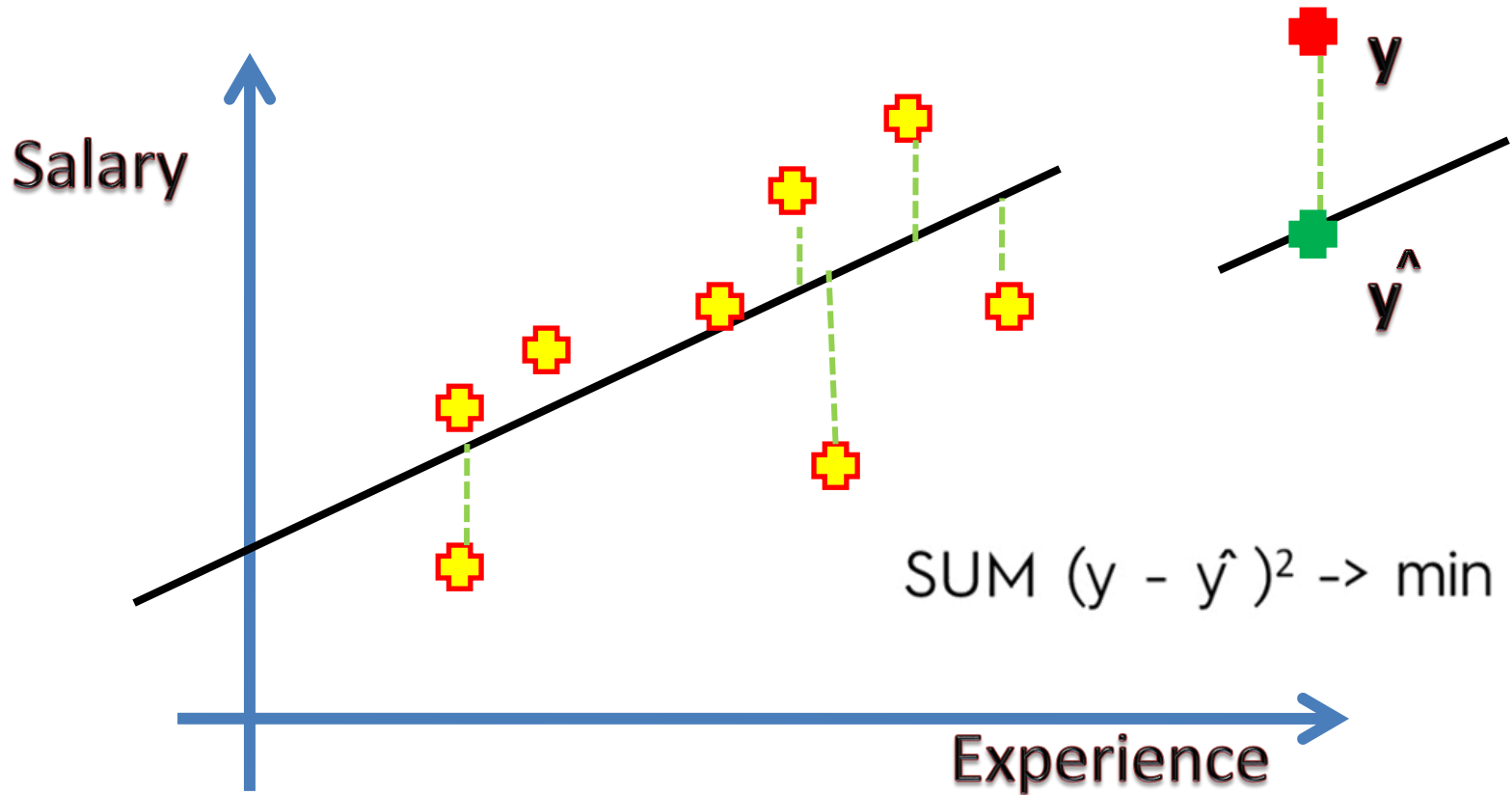
b1 is coefficient of X or the slope of
the line

b0 is the constant called intercept

Linear Regression



Linear Regression



Multiple Linear Regression

$$y = b_0 + b_1 * x_1 + b_2 * x_2 + \dots + b_n * x_n$$

Dummy Variables

- A Dummy variable or Indicator Variable is an artificial variable created to represent an attribute with two or more distinct categories/levels.
- Regression analysis treats independent (X) variables in the analysis as numerical.
- To include columns like Gender, Product Brand, then Dummy variables are created in this situation to trick the regression algorithm into correctly analyzing column variables.

Encoding Categorical Variable