LINEAR REGRESSION

Linear Regression is a supervised machine learning algorithm where the predicted output is continuous and has a constant slope. It’s used to predict values within a continuous range

Linear regression attempts to model the relationship between two variables by fitting a linear equation to observed data. One variable is considered to be an explanatory variable, and the other is considered to be a dependent variable.

A linear regression line has an equation of the form ***Y = a + bX***, where ***X*** is the explanatory variable and ***Y*** is the dependent variable. The slope of the line is ***b***, and ***a*** is the intercept.

For the Multivariate Regression:-

multi-variable linear equation might look like this, where W represents the coefficients, or weights, our model will try to learn.

*f*(*x*,*y*,*z*)=*w*1*x*+*w*2*y*+*w*3*z*