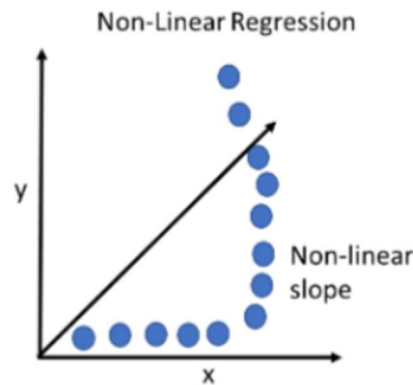


## Non Linear Regression

It involves fitting data to a model and then communicating the results as a numerical function. Simple linear regression establishes a straight line relationship between two factors (X and Y) ( $y = mx + b$ ),



Whereas nonlinear regression establishes a nonlinear relationship between the two factors. The prediction of population increase over time or the relationship between a nation's GDP and time can both be done using nonlinear regression.

“Non-linear regression is a type of regression analysis where the relationship between the independent variables and the dependent variable is modeled as a non-linear function. Unlike linear regression, which assumes a straight-line relationship, non-linear regression can capture more complex patterns by using various mathematical functions such as polynomials, logarithms, exponentials, and others.”