**LOGISTIC REGRESSION**It is a **supervised** classification algorithm.

Logistic regression is a **statistical analysis** method to predict a binary outcome, such as yes or no, based on prior observations of a data set. A logistic regression model predicts a dependent data variable by analyzing the relationship between one or more existing independent variables.

Mathematically,

P(Y=1) as a function of X.

It is **one of the simplest ML algorithms** that can be used for various classification problems such as spam detection, Diabetes prediction, cancer detection etc.