Linear Regression and Logistic regression

Linear regression analysis data bases on dependent and independent variable, standard deviation, and the relationship. The model is based on y = mx +b. between them and find the best fitted line using the least squares and to predict data based on the data it observed.

It predicts value using R squared value. It has a qualitative data.

Logistic regression is a discriminative algorithm that direct estimates data by grouping them. It uses qualitative data and has a target value from [0,1] and a S shaped curve.

The strength of linear model is that it predicts continuous value while classification predicts categorical model.

In logistic regression, it may be discriminative, but it can be suited for larger amount of data, while naive bayes algorithm is better when being used on small dataset.

Comparing to Logistic regression, Naiive bayes has higher bias and variance.