

Naïve Bayes Classifier Algorithm

- 1] supervised learning algorithm
- 2] mainly used in *text classification* that includes a high-dimensional training dataset.
- 3] It is a probabilistic classifier, which means it predicts on the basis of the probability of an object.

Naive Bayes → naive+bayes

1] **naive** → It is called Naïve because it assumes that the occurrence of a certain feature is independent of the occurrence of other features.

Each feature has some amount of contribution in predication

2] **bayes** → base on bayes theorem

Bayes theorem used to determine the probability of a hypothesis with prior knowledge.

$$P(A|B) = \frac{P(B|A)P(A)}{P(B)}$$