

K Nearest Neighbours

- It is a method for classifying cases based on their similarity to other cases.
- Points or cases that are near to the case under consideration are said to be its 'neighbours'.
- The category to which a case gets allotted to is based on the number of similar cases with the same class label near to it.
- The algorithm starts with picking a value for K, then calculating the distance of unknown cases from all the cases, selecting the K-observations that are nearest to the unknown data point and finally predicting the label of the unknown cases using the most popular response value from the K-nearest neighbours.
- Here's a visualization of the K-Nearest Neighbors algorithm:

