**Linear Kernel**, also referred to as the “Non-kernel”, the linear kernel is the simplest of all the kernels. The data isn’t projected onto higher dimensions when this kernel is used, so it is just the inner product of x and y with an optional constant term c.

Linear Kernel is used when the data is Linearly separable, that is, it can be separated using a single Line. It is one of the most common kernels to be used. It is mostly used when there are a large number of Features in a particular Data Set. One of the examples where there are a lot of features, is Text Classification, as each alphabet is a new feature. So it is mostly used in Text Classification.

**Radial Basis Function kernel** is the most commonly used kernel in Support Machine Vectors, defined as K(x, 𝛾) = exp (-𝛾||x -𝛾ll^2) where 𝛾 is a free parameter that scales the amount of influence two points have on each other. It is used for function approximation problems.

**Classifier Decision Tree** is a Supervised learning technique that can be used for both classification and Regression problems, but mostly it is preferred for solving Classification problems. It is a tree-structured classifier, where internal nodes represent the features of a dataset, branches represent the decision rules, and each leaf node represents the outcome.

**Random Forest** is a commonly used machine learning algorithm which combines the output of multiple decision trees to reach a single result. It handles both classification and regression problems.

**Logistic Regression** is a type of statistical model that is often used for classification and predictive analytics. Logistic regression estimates the probability of an event occurring, such as voted or didn’t vote, based on a given dataset of independent variables. Since the outcome is a probability, the dependent variable is bounded between 0 and 1. In logistic regression, a logit transformation is applied on the odds—that is, the probability of success divided by the probability of failure.

**K-Means Clustering** is an unsupervised learning algorithm that is used to solve the clustering problems.