1. **Linear Regression: (LinReg)**
2. fit(x, y):

It takes two lists in the parameters(lists only) where y is the target feature. It will calculate the slope using the following equation:

1. pred(x):

It takes a single number as input and calculates the equivalent output using the constants calculated in the fit() function.

1. **Logistic Regression: (LogReg)**
2. fit(x, y):

It uses the sigmoid function to evaluate a binary decision. It uses Linear Regression to formulate the equation for given data. Only take list as input parameters, with y as the target feature.

1. pred(x):

It uses the sigmoid function and constants from the LinReg to calculate the binary decision(0 or 1).

1. **K Nearest Neighbours: (KNN)**
2. fit(x, y, z):

The x and y parameters are postional parameters and z is the target feature. The fitness function here simply stores all the data in the class.

1. pred(x, y, k):

The x and y are the input data to be evaluated and k is the number of neighbours to be considered.

1. **K Means: (KMeans)**
2. fit(x, y, z):

Fitness function calculates the averages of all points corresponding to each classification and makes centers respective to each classification. The method used is different in respect that it does not iterate after every classification but rather, calculates the mean centre only once.

1. pred(x, y):

This prediction calculates the distance from all centres and the given point (x,y) and returns the group it is closest to with respect to the centre that was calculated in the fit() function.

1. dist(p, c)

It calculates the distance between point p and c using pythagorean distance formula.