Model:

$$Y=1/(1+e^{-z})$$

Where Z = k0 + k1\*x1 + k2\*x2

If( y>=0.5, student will pass the exam. Otherwise fail)

Find the value of K0,k1& k2 by applying logistic regression on given data.

Take inititial value of K0=k2=k3=0 and alpha=0.001.

Calculate the value of y by calculating z as follows-

$$Z=0 + 0*x1 + 0*x2$$

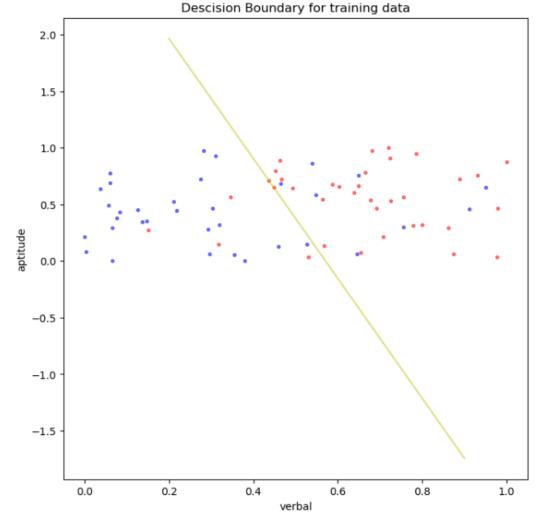
Where x1 & x2 is from given data.

Repeat this process until convergence of k0,k1,k2 takes place.

After 10000 iteration:

K0 = -3.2896940314747503 K1 = 5.763351011731899K2 = 1.0885007714121313

Decision boundary look like below:



## Applying this on test data:

