-SVM Implementation:

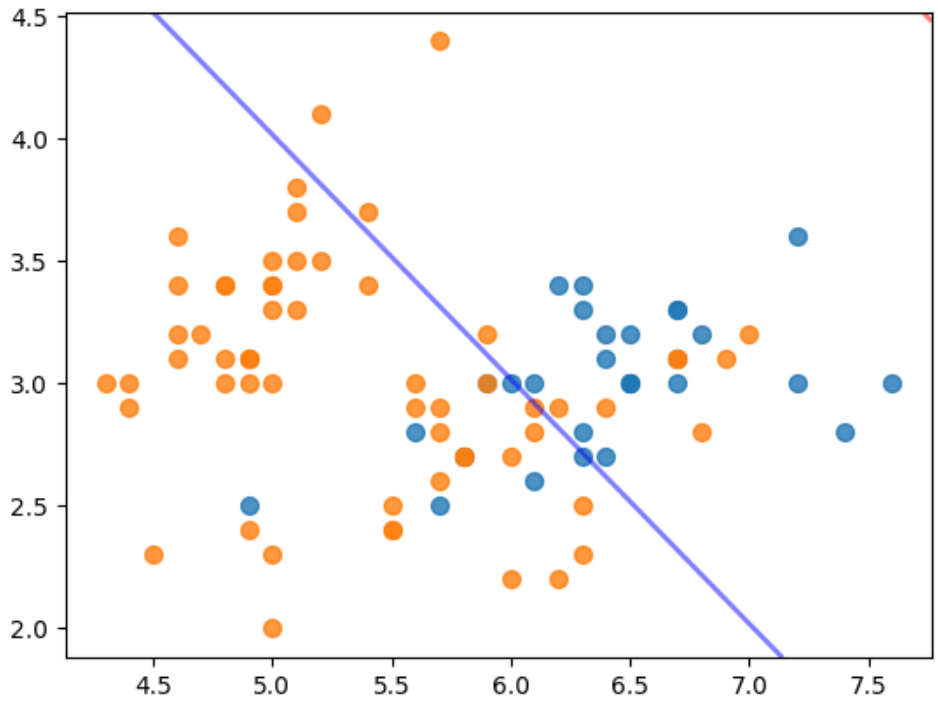
-At first I converted the 3 class classification to binary by considering 2 classes 1 single class (one to all) a further modification(I did not add it) can be changing the combined classes every time to loop over the 3 different options and take majority vote or avg or whatever ,then mapped one target to -1 and the other to 1 to use it in the equation yi(w.xi+b).

-Used only the first 2 features .

-After that gradient descent concept is applied by assuming a number of iterations to optimize the weights and terminate when the cost function is almost constant .

Accuracy->71.66666666666667

Plot of 2 classes with separation line



I took the lines for ploting the straight line copy from a source because I did not know how to do it.