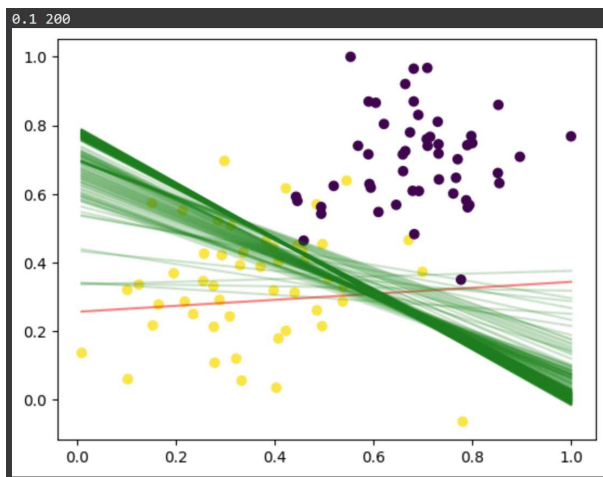
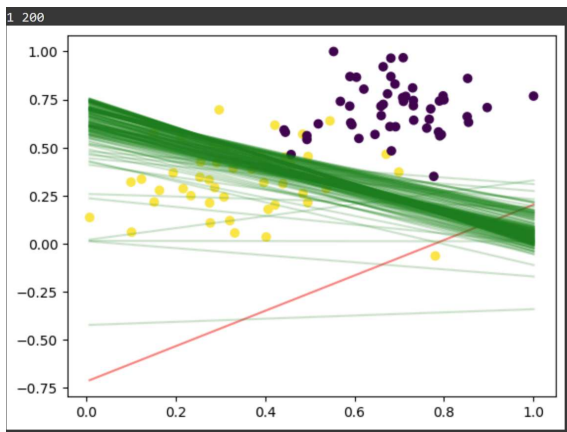
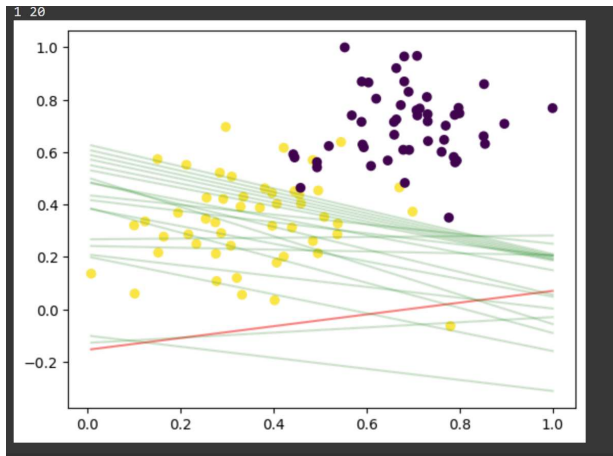


Part 1: Heuristic

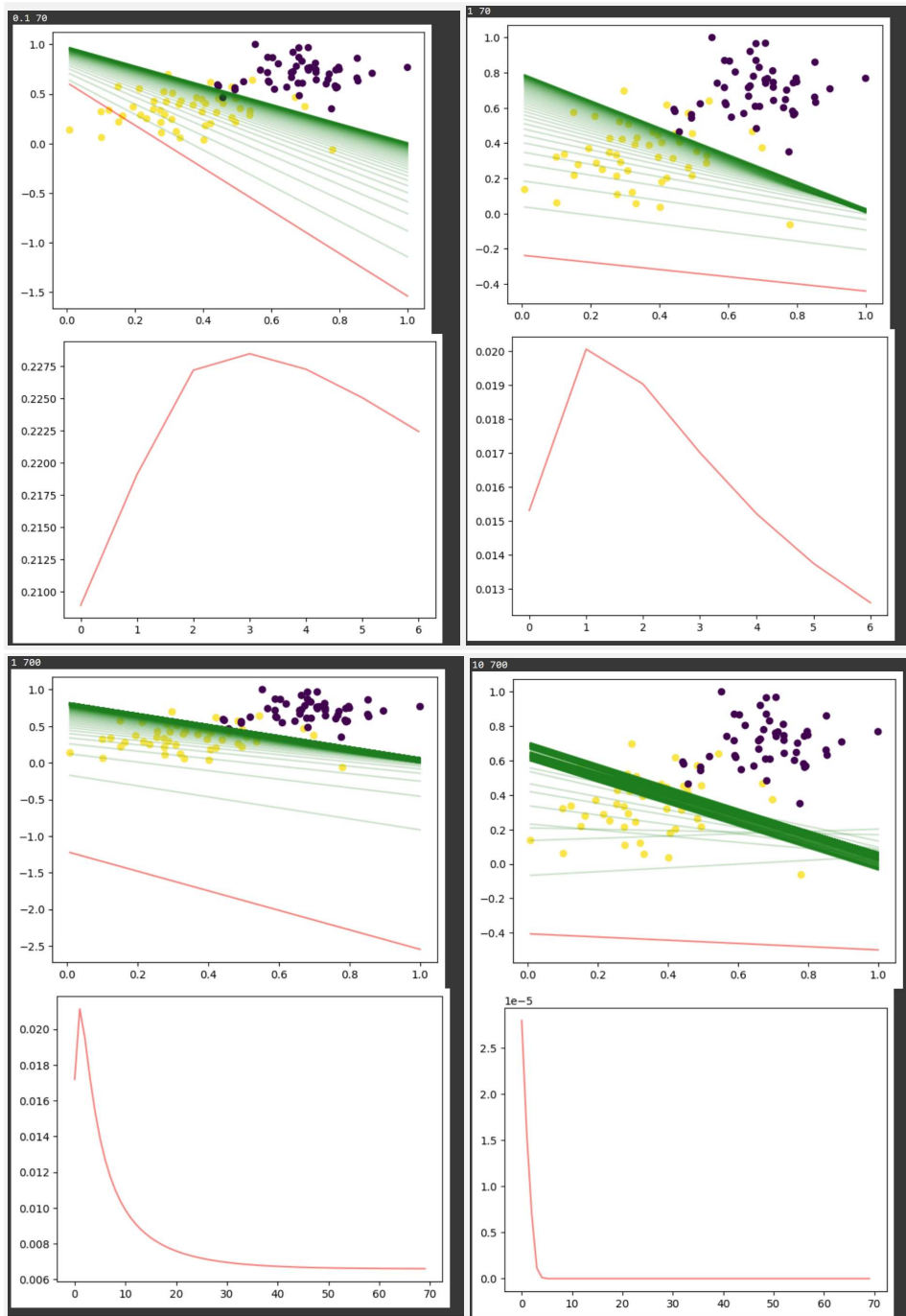
Learning rate and epochs are on top



Analysis of results:

In this case because of the heuristic the learning and epoch has less of an effect in this situation but it does show how jittery the results are because it never settles. The heuristic does pretty good overall but it can be better

Part 2: Gradient



Analysis: So as we increase the learning rate and epochs the graphs under go changes . First it under fits and we have a high error rate, then we increase the learning rate and our error goes down. We then incrate our epochs as well and we see a very solid graph we a good downward trend of error. Finally we increase our learning rate again and we end up overfitting the graph