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Parameters Estimated and Accuracy

feature 1 digit 0 mean: 44.1969408163
feature 1 digit 0 variance: 114.786967628
feature 2 digit 0 mean: 87.4399171081
feature 2 digit 0 variance: 101.097642814

feature 1 digit 1 mean: 19.2829451531
feature 1 digit 1 variance: 30.3500682524
feature 2 digit 1 mean: 61.2299374375
feature 2 digit 1 variance: 80.1107022854

Accuracy:
digit 0: 0.9173469387755102
digit 1: 0.9233480176211454

Analysis

The project was a good way to get hands on with the naive bayes concept that was gone over in the lecture this past week. The numpy python library made the implementation pretty easy as simply .mean() and .std() methods could be applied to get the mean values and variance values to train the features. Then the apply_along_axis method can be applied to extract mean and std values of each parameter using that trained dataset.

I hadn't dived too deep into the numpy library until now so reading through the documentation it was really interesting seeing exactly how powerful just this one library is in handling what was a fairly complicated topic for me to understand like naive bayes.