Problem Set 10

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Before I begin, it's worth noting that my svm model was not finished training at the time of writing this document. The code is complete but I was not able to obtain results in time.

The optimal parameters for the remaining models are listed in the table below.

The out-of-sample performances were similar across each algorithm. The tree model scored the highest with a mean accuracy of .86 and knn scored the lowest with a mean of .84.

Algorithm	Parameter	Optimal Value
logit	penalty	1e-10
tree	cost complexity	.001
tree	tree depth	15
tree	min n	10
nnet	penalty	1e+00
nnet	hidden units	1
knn	neighbors	30