## PS10 Dawkins

## Julie Dawkins

## April 2024

## 1 Question 9

I have created a table showing the results of each of the tribes of learning. (Note that SVM, support vector machine, is absent; I could not get the code to run, but the code is still in my R file.)

Table 1: Model Performance Metrics

penalty	.estimate	alg	cost complexity	tree depth	min n	hidden units	neighbors
0.00	0.853	logit					
	0.868	tree model	0.00	15.00	20.00		
0.00	0.838	neural net				10.00	
	0.844	k nearest neighbors					28.00

We can see that the estimate is all in the .8s for each model, but the logit and the tree model perform the best. The tree model has a roughly 0.87 (87%) accuracy rate and was my highest, followed by the logist at approximately 85% accuracy. Neural net and k nearest neighbors performed the worst for me, hovering around 84%.