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Ex2

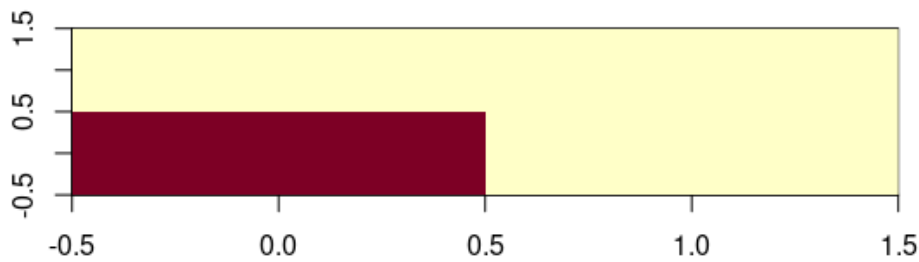
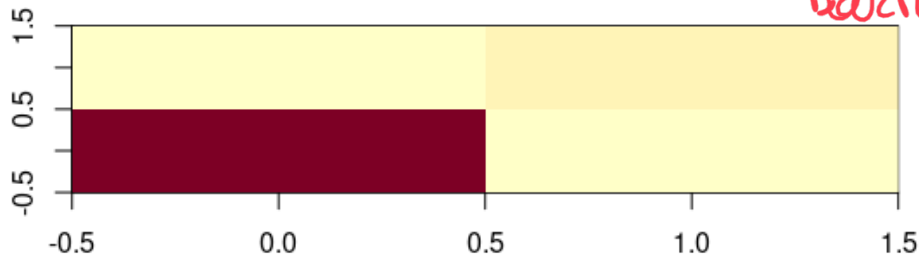
a)

We use Linear Discriminant Analysis, since we have:

1. normality in each group (verified with mcshapiro test)
2. equal misclassification costs
3. same covariance in all groups, indeed

p-values?

? are you sure? They don't look equal to me  
Bartlett's test?



Estimates are:

Mean:

	price	average.length
Germany	59.82982	5.891951
US	29.74888	4.377556

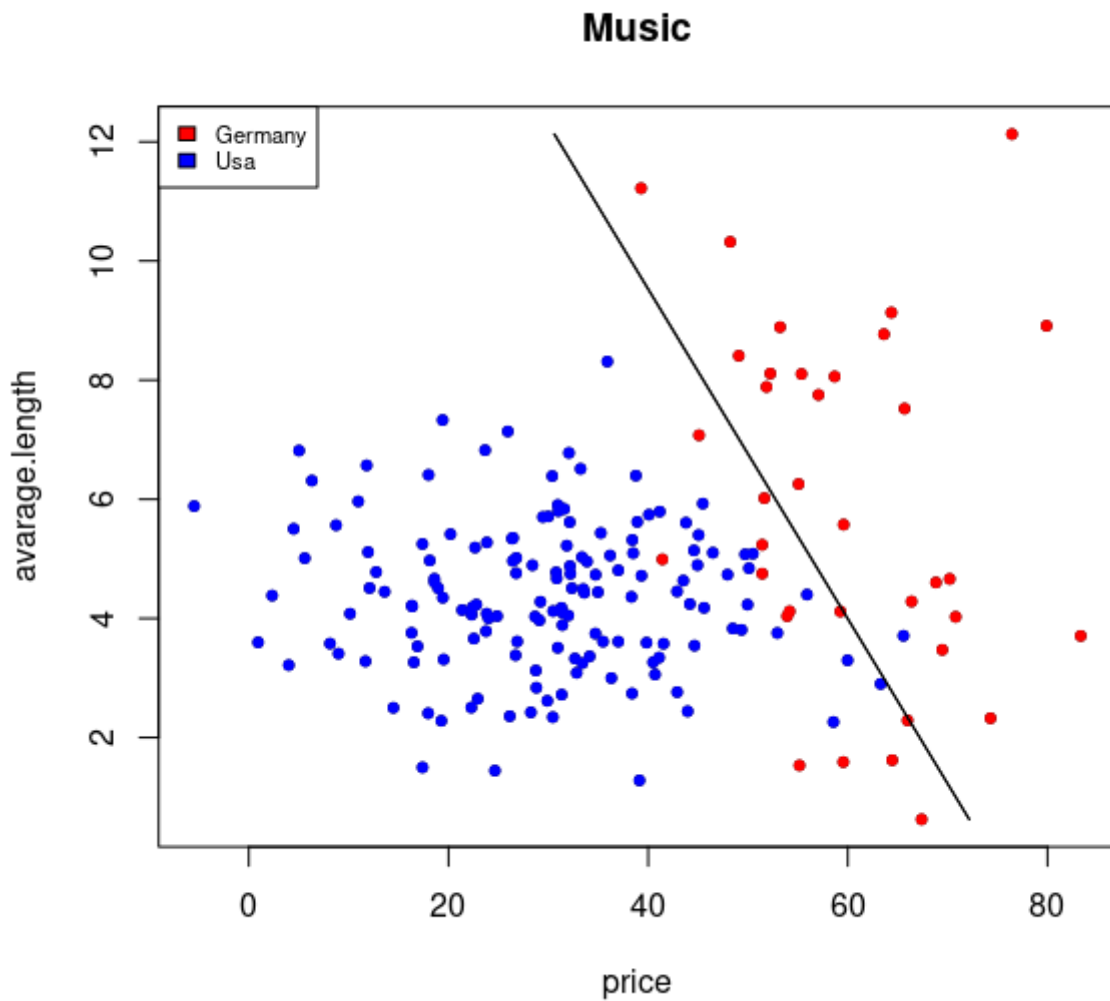
Covariance

	price	average.length
price	161.37898	-2.671480
average.length	-2.67148	2.853387

✓ Coherent

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Plot:



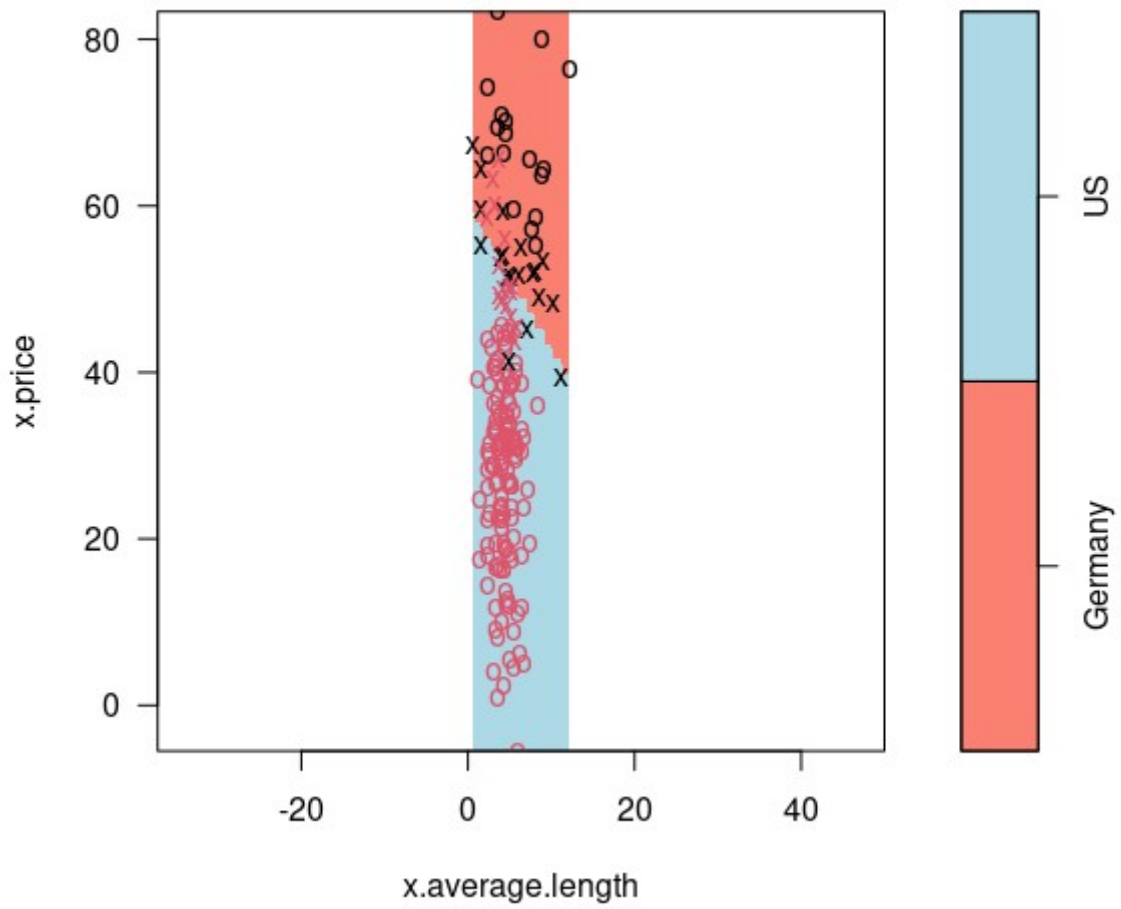
b)  
AER with CV: 0.04795322

c)  
probability: 0.6388435, computed using the same estimate for the plot

d)  
US

e) we choose 0.01 (minimizing misclassification error)  
Plot:

**SVM classification plot**



We classify again US