

## Exercises 4/6

For exercise 4, I don't really know where to start in the first part, and the second part yields an error that says 'train' and 'class' have different lengths.

I'm not really sure how to do exercise 6 either, I wrote `lda(Species~Sepal.Width+Sepal.Length,data=iris)`, which yields the following (which I am not sure is correct):

Call:

```
lda(Species ~ Sepal.Width + Sepal.Length, data = iris)
```

Prior probabilities of groups:

setosa	versicolor	virginica
0.3333333	0.3333333	0.3333333

Group means:

	Sepal.Width	Sepal.Length
setosa	3.428	5.006
versicolor	2.770	5.936
virginica	2.974	6.588

Coefficients of linear discriminants:

	LD1	LD2
Sepal.Width	2.768109	-2.0960764
Sepal.Length	-2.141178	-0.8152721

Proportion of trace:

LD1	LD2
0.9628	0.0372

For the confusion matrix I tried to read `??confusionMatrix` (from the "caret" package) but it's pretty confusing to me.

hw1

Edit good question 0

Updated 4 years ago by Charles Hwang

**S** the students' answer, where students collectively construct a single answer

Actions

Save your model:

```
Saved_name <- lda(species~...)
```

Then make predictions with the testing data:

```
Saved_predictions <- predict(saved_name, data=testing data)
```

In this example, the testing data is basically a grid of points to create the boundaries.

Confusion matrix is just a table:

```
Table(Training,testing)
```

to see if the predictions match the actuals.

Feel free to look at what I did, my stuff is saved in my github. Search github users for AlexRblohm, then find the repo and file.

I hope that helps!

~ An instructor (Gregory J. Matthews) endorsed this answer ~

Edit

undo thanks | 2

Updated 4 years ago by Alex Blohm

### followup discussions for lingering questions and comments

Actions ▾



Resolved



Unresolved

@8\_f1



**Charles Hwang** 4 years ago

Thank you so much for the GitHub repositories. You are truly a lifesaver. I know the error I had for #4 wasn't unique and I think I had a command or two off in #6.

Do you know for #5 why `geom_point()` needs to be added to the end? I know without it there is no data plotted, I just don't really understand why it works that way and why nothing needs to be invoked inside it.

helpful! | 0

Reply to this followup discussion



Resolved



Unresolved

@8\_f2



**Alex Blohm** 4 years ago

The ggplot is like setting up the graph (think like creating the axes), `geom_pts()` adds the actual points to the graph.

`Geom_line()` would add a line.

I'm not very good at ggplot yet but I'm taking a data camp course on it. Others would be better with this...

helpful! | 0



**Charles Hwang** 4 years ago

This makes sense. Thank you!

helpful! | 0

Actions ▾

Reply to this followup discussion

Start a new followup discussion