

#title: Week 10 Logistic regression - Binary Classifier

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#Date: 05/22/2021

```
getwd()
```

```
setwd("E://Repos/StatisticsR/DSC520-Statistics/week10")
```

```
binary_df <- read.csv("binary-classifier-data.csv")
```

```
head(binary_df)
```

```
binary_model <- glm(label~x+y,data=binary_df,family=binomial())
```

```
summary(binary_model)
```

```
psuedo_R2 <- 1-(binary_model$deviance/binary_model$null.deviance)
```

```
psuedo_R2
```

What is the accuracy of the logistic regression classifier?

Very poor, with very low Pseudo R-squared of 0.01.

Residual deviance of 2052.1 is only slightly smaller than null deviance of 2075.8, hence a low Pseudo R-squared

$p < 0.01$ for the intercept and y,x however is too high

Multicollinearity not addressed, but don't think it's an issue with low Pseudo R-squared and only two predictors.

AIC of 2058.1 can be compared with other models.