

# HW2 - Naive Bayes

*William Morgan*

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## Problems

1. Tune the `laplace` smoothing parameter to find the best Naive Bayes Classifier for the `sms_spam` dataset
  2. Naive Bayes Classification with a numeric  $x$
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### 1 : Tuning the `laplace` parameter

```
lap_range <- c(0, .01, .1, 1, 5, 10, 20, 50)

errors <- double(length = length(lap_range))

for (i in seq_along(lap_range)) {
  errors[i] <- nbTuning(sms_dtm, sms$type, laplace = lap_range[i])
}
```

laplace_value	error
0.00	0.0215208
0.01	0.0179340
0.10	0.0193687
1.00	0.0193687
5.00	0.0344333
10.00	0.0767575
20.00	0.1212339
50.00	0.1370158