



MACHINE LEARNING
WITH R

ACADGILD

Session 3: Naïve Bayes Classification

Assignment Solution 1

Session 3: Naïve Bayes Classification

Assignment Solution

Table of Contents

1. Introduction	3
2. Problem Solution	3
3. Output.....	4

1. Introduction

In this assignment, you will create confusion matrix.

2. Problem Solution

```
library (e1071)

data (HouseVotes84, package="mlbench")

model <- naiveBayes(Class ~ ., data = HouseVotes84)

# predict the outcome of the first 20 records
predict(model, HouseVotes84[1:20,-1])

# same but displaying posteriors
predict(model, HouseVotes84[1:20,-1], type = "raw")

# now all of them: this is the resubstitution error
pred <- predict(model, HouseVotes84[,-1])

# form and display confusion matrix & overall accuracy
tab <- table(pred, HouseVotes84$Class)

tab

# to know the model accuracy
sum(tab[row(tab)==col(tab)]) / sum(tab)
```

3. Output