

# NaiveB.R

mac

2019-11-08

```
library(sqldf)
```

```
## Loading required package: gsubfn
```

```
## Loading required package: proto
```

```
## Warning in doTryCatch(return(expr), name, parentenv, handler): unable to load shared object '/Library
```

```
##   dlopen(/Library/Frameworks/R.framework/Resources/modules//R_X11.so, 6): Library not loaded: /opt/X
```

```
##   Referenced from: /Library/Frameworks/R.framework/Versions/3.3/Resources/modules/R_X11.so
```

```
##   Reason: image not found
```

```
## Could not load tcltk. Will use slower R code instead.
```

```
## Loading required package: RSQLite
```

```
library(e1071)
```

```
Airb=read.csv("~/Documents/R/AB_NYC_2019.csv",header=T,na.strings="?")
```

```
attach(Airb)
```

```
#price_x -> target classification value
```

```
price_x=Airb$price>100
```

```
Airb=data.frame(Airb,price_x)
```

```
#train and test divide
```

```
TRain=sqldf("select longitude,latitude,minimum_nights,  
availability_365,price_x from Airb where price!=0 and  
price<1000 and id%10!=1")
```

```
TEst=sqldf("select longitude,latitude,minimum_nights,  
availability_365,price_x from Airb where price!=0 and  
price<1000 and id%10==1")
```

```
fit=naiveBayes(price_x~.,data=TRain)
```

```
pred=predict(fit,TEst,type="class")
```

```
#result
```

```
table(Actual = TEst$price_x, Predicted = pred)
```

```
##           Predicted
```

```
## Actual  FALSE TRUE
```

```
##   FALSE  1399 1022
```

```
##   TRUE   517 1939
```

```
cm = as.matrix(table(Actual = TEst$price_x, Predicted = pred))
```

```
accu=sum(diag(cm))/length(TEst$price_x)
```

```
#accuracy
```

```
message(accu)
```

```
## 0.684437153988107
```