Assignment 9

```
setwd("C:/Users/tracy/Desktop/Multivariate Statistical Analysis/作业/作业 9/directory")
install.packages("MASS")
library(MASS)
al<-read.table("ALCOHOL.txt",header=T,sep="\t")
dim(al)
View(al)
al.lda<-lda(TYPE~. ,data=al)
names(al.lda)
al.lda$prior
al.lda$N
al.lda$means
al.lda$scaling
newdrink <- data.frame(MEOH=500,ACET=400,BU1=3,MEPR=30,ACAL=20,LNPRO1=10)
predict(al.lda,newdata=newdrink)$class
```

```
> al.lda$prior
   KIRSCH     MIRAB     POIRE
0.2337662 0.3766234 0.3896104
> al.lda$N
[1] 77
> al.lda$means
          MEOH     ACET       BU1      MEPR     ACAL     LNPRO1
KIRSCH  378.6944 218.0167  1.511111 32.06667 11.16667 6.231111
MIRAB   939.1379 247.3448 17.906897 30.55172 12.54138 4.883103
POIRE  1035.4000 173.3667 19.620000 43.00000 13.27333 5.145667
> newdrink <- data.frame(MEOH=500,ACET=400,BU1=3,MEPR=30,ACAL=20,LNPR
O1=10)
> predict(al.lda,newdata=newdrink)$class
[1] KIRSCH
```

So this drink will be classified in the group KIRSCH.