```
library(MASS)

?birthwt

names(birthwt)
summary(birthwt)
table(birthwt$low)

hist(birthwt$bwt,xlab="Birthweight (g)")

mod0<-glm(low~.-bwt,family=binomial,data=birthwt)
summary(mod0)

table(birthwt$race)
table(birthwt$smoke)

table(birthwt$race,birthwt$smoke)

mod1<-glm(low~race*smoke,family=binomial,data=birthwt)
summary(mod1)

drop1(mod1,test="Chisq")

mod2<-glm(update(mod1,.~.-race:smoke),family=binomial)
summary(mod2)

lp.fit<-predict(mod2)
p.fit<-predict(mod2,type="response")

thresh<-0.5
Y.fit<-as.numeric(p.fit>thresh)
table(Y.fit)
table(Y.fit,birthwt$low)

thresh<-0.4
Y.fit<-as.numeric(p.fit>thresh)
table(Y.fit)
table(Y.fit,birthwt$low)

################################################
install.packages("epicalc")
library(epicalc)
lroc(mod2)
```