lec10_3

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Do a model comparasion using LR test

H0: the coefficient of quadratic term of Temp = 0;

Ha: the coefficient of quadratic term of Temp != 0

```
library(car)
challenger <- read.csv("Challenger.csv")
fit.1 <- glm(O.ring/Number ~ Temp, weight = Number, family = binomial(link = "logit"),data = challenger)
fit.2 <- glm(O.ring/Number ~ Temp + I(Temp^2), weights = Number, family = binomial(link = "logit"), data = c
hallenger)
anova(fit.2, fit.1, test = "LR")
```

```
## Analysis of Deviance Table
##
## Model 1: O.ring/Number ~ Temp + I(Temp^2)
## Model 2: O.ring/Number ~ Temp
##   Resid. Df Resid. Dev Df Deviance Pr(>Chi)
## 1        20     17.592
## 2        21     18.086 -1  -0.4947   0.4818
```

Based on p-value > 0.05, we cannot reject H0. So we accept that the quadratic term of Temp is not needed in our model.