2. Use natural splines to fit the same data.
(a) Based on what you saw in the previous exercise, choose three values of DF that you might try here. **List them here.** You are not limited to the same DF values used for the regression splines, if you think that another value might be better than what you tried above.
(b) **Show the plot** again, using the three models you suggest.

```
with(data, plot(Temp, Ozone))
legend("topleft", legend=c("Natural Spline 5 DF", "Natural Spline 7 df",
                           "Natural Spline 9 df"),
       lty="solid", col=colors()[c(24,121,145,84)], lwd=2)

# 5 DF spline
nat.spl.5 <- lm(data=ordered.data, Ozone ~ ns(Temp,df=5))
lines(x=ordered.data$Temp, y=predict(nat.spl.5, newdata=ordered.data), col=colors()[24], lwd=2)

# 7 DF spline
nat.spl.7 <- lm(data=ordered.data, Ozone ~ ns(Temp,df=7))
lines(x=ordered.data$Temp, y=predict(nat.spl.7, newdata=ordered.data), col=colors()[121], lwd=2)

# 9 DF spline
nat.spl.9 <- lm(data=ordered.data, Ozone ~ ns(Temp,df=9))
lines(x=ordered.data$Temp, y=predict(nat.spl.9, newdata=ordered.data), col=colors()[145], lwd=2)
```