hearing

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R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:
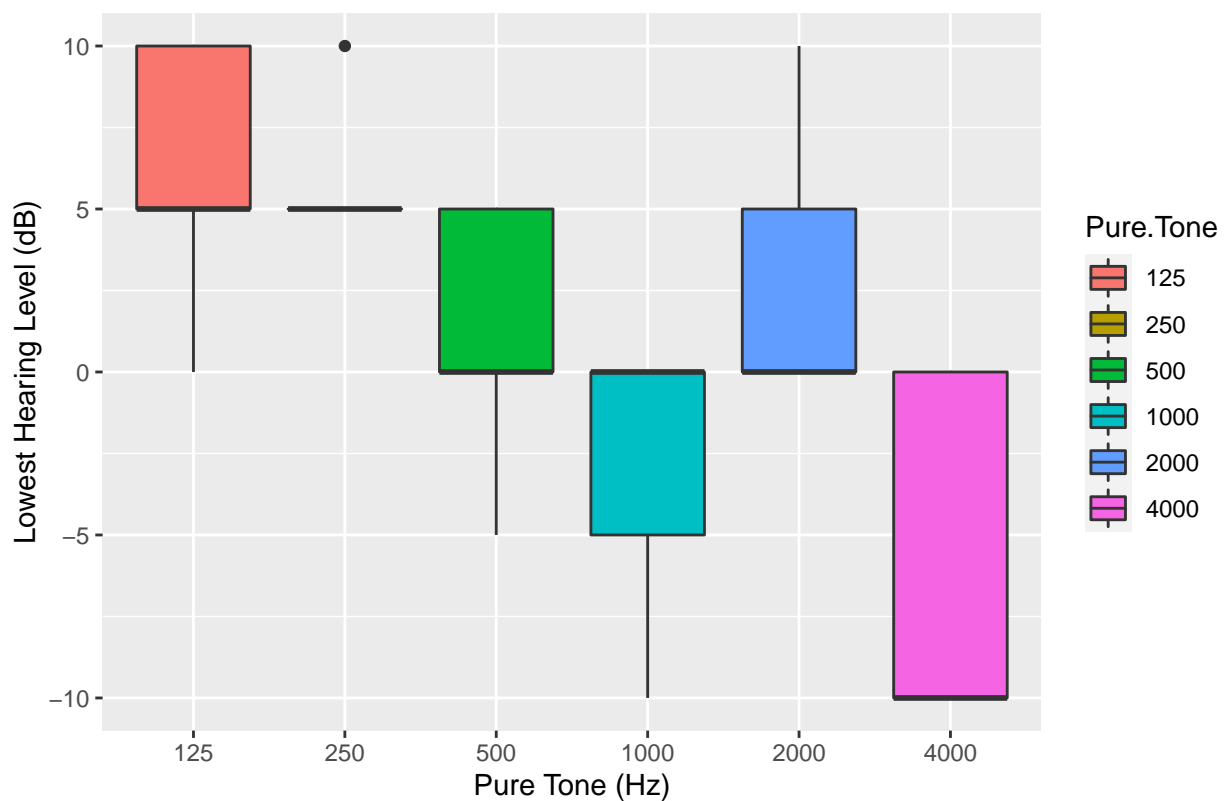
```
hearingdata <- read.csv("hearingresult.csv", header=TRUE)
hearingdata$Pure.Tone <- as.factor(hearingdata$Pure.Tone)
summary(hearingdata)
```

```
##     X125.Hz           X250            X500            X1000
##  Min.   :0.0000   Min.   :0.0000   Min.   :0.0000   Min.   :0.0000
##  1st Qu.:0.0000   1st Qu.:0.0000   1st Qu.:0.0000   1st Qu.:0.0000
##  Median :0.0000   Median :0.0000   Median :0.0000   Median :0.0000
##  Mean   :0.1667   Mean   :0.1667   Mean   :0.1667   Mean   :0.1667
##  3rd Qu.:0.0000   3rd Qu.:0.0000   3rd Qu.:0.0000   3rd Qu.:0.0000
##  Max.   :1.0000   Max.   :1.0000   Max.   :1.0000   Max.   :1.0000
##     X2000            X4000             L                R           Pure.Tone
##  Min.   :0.0000   Min.   :0.0000   Min.   :-10.000   Min.   :-5.00   125 :5
##  1st Qu.:0.0000   1st Qu.:0.0000   1st Qu.:  0.000   1st Qu.: 5.00   250 :5
##  Median :0.0000   Median :0.0000   Median :  0.000   Median : 5.00   500 :5
##  Mean   :0.1667   Mean   :0.1667   Mean   :  1.167   Mean   : 5.00   1000:5
##  3rd Qu.:0.0000   3rd Qu.:0.0000   3rd Qu.:  5.000   3rd Qu.: 8.75   2000:5
##  Max.   :1.0000   Max.   :1.0000   Max.   : 10.000   Max.   :15.00   4000:5
```

Including Plots

You can also embed plots, for example:

Boxplots of Lowest Hearing Level Still Audible by Pure Tones (LEFT EAR)


```
my.bp.right <- ggplot(data=hearingdata, aes(y=R, x=Pure.Tone, fill=Pure.Tone) ) +
  geom_boxplot()
my.bp.right <- my.bp.right + ylab("Lowest Hearing Level (dB)") + xlab("Pure Tone (Hz)")
my.bp.right <- my.bp.right + ggtitle("Boxplots of Lowest Hearing Level Still Audible by Pure Tones (RIGH
my.bp.right
```

Boxplots of Lowest Hearing Level Still Audible by Pure Tones (RIGHT EAR)