Q2_New

Joe DeMaro

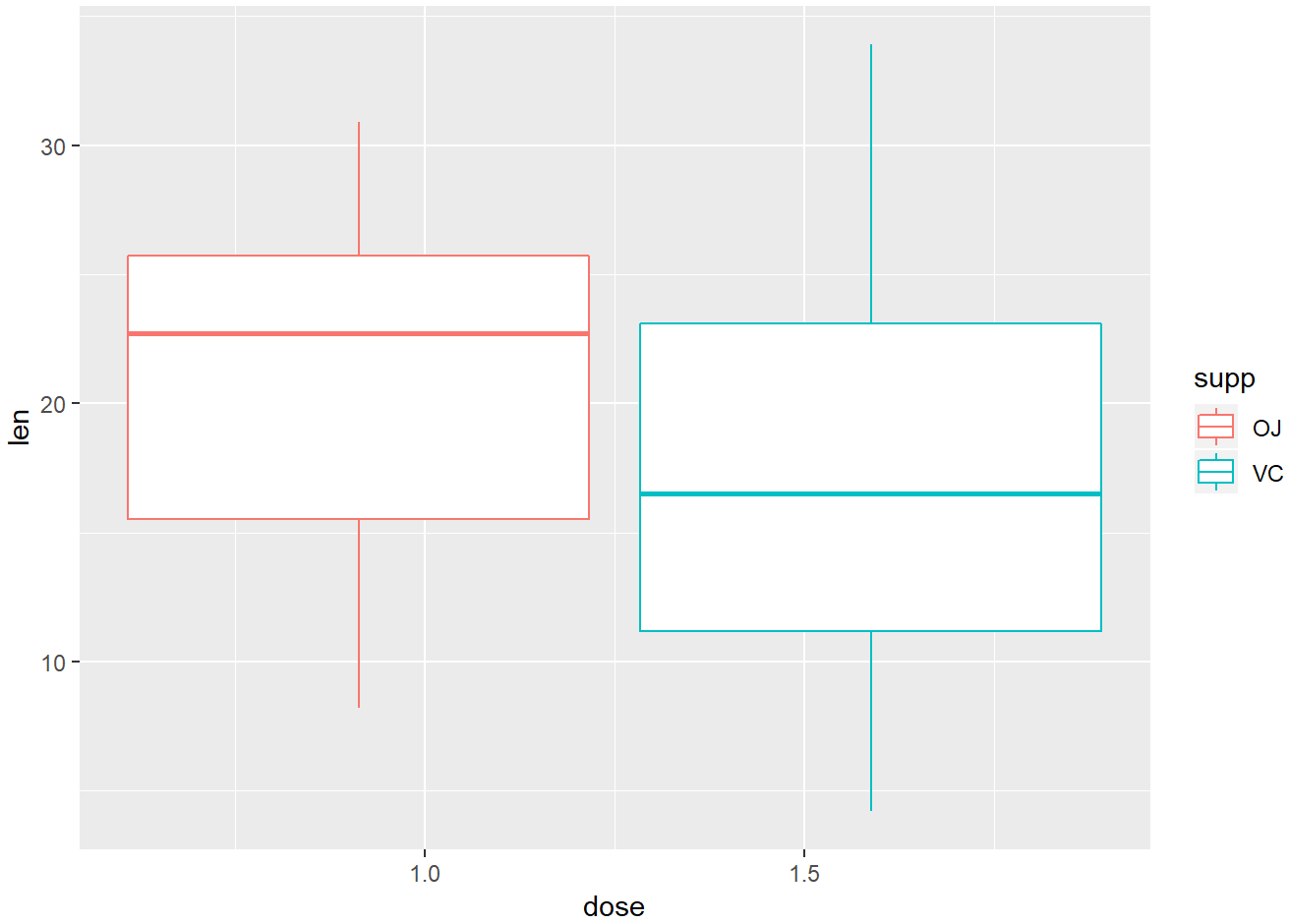
December 20, 2018

```
knitr::opts_chunk$set(echo = TRUE)
library(ggplot2)
library(reshape2)
library(plyr)
library(tidyverse)
## -- Attaching packages ---------------------------------------------------
------- tidyverse 1.2.1 --
## v tibble  1.4.2     v purrr   0.2.5
## v tidyr   0.8.2     v dplyr   0.7.8
## v readr   1.3.0     v stringr 1.3.1
## v tibble  1.4.2     v forcats 0.3.0
## -- Conflicts ------------------------------------------------------------
- tidyverse_conflicts() --
## x dplyr::arrange()   masks plyr::arrange()
## x purrr::compact()   masks plyr::compact()
## x dplyr::count()     masks plyr::count()
## x dplyr::failwith()  masks plyr::failwith()
## x dplyr::filter()    masks stats::filter()
## x dplyr::id()        masks plyr::id()
## x dplyr::lag()       masks stats::lag()
## x dplyr::mutate()    masks plyr::mutate()
## x dplyr::rename()    masks plyr::rename()
## x dplyr::summarise() masks plyr::summarise()
## x dplyr::summarize() masks plyr::summarize()
#load ToothGrowth data to a df
tgrowth <- ToothGrowth

summary(tgrowth)
##       len        supp         dose
##  Min.   : 4.20   OJ:30   Min.   :0.500
##  1st Qu.:13.07   VC:30   1st Qu.:0.500
##  Median :19.25           Median :1.000
##  Mean   :18.81           Mean   :1.167
##  3rd Qu.:25.27           3rd Qu.:2.000
##  Max.   :33.90           Max.   :2.000
# g <- ggplot(aes(x=dose, y=len), data=tgrowth) +
#           geom_point(aes(color=supp))
# print(g)

gg <- ggplot(aes(x=dose, y=len), data=tgrowth) +
          geom_boxplot(aes(color=supp))

print(gg)
```




```
summary_tgrowth <- aggregate(tgrowth$len, by=list(tgrowth$supp,tgrowth$dose),
FUN=mean, na.rm=TRUE, na.action=NULL)

melted <- melt(tgrowth, id.vars=c("supp", "dose"))

means <- ddply(melted, c("supp", "dose", "variable"), summarise,
               mean=mean(value))
colnames(summary_tgrowth) <- c("Supp", "Dose", "Len")

means.barplot <- qplot(x=supp, y=mean, fill=len, data=means, geom="bar")
#
# #create a summary of toothgrowth data
# summary(tgrowth)

#means.barplot
```

Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.