project_tooth

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December 21, 2015

Zadání: Now in the second portion of the class, we're going to analyze the ToothGrowth data in the R datasets package.

- Load the ToothGrowth data and perform some basic exploratory data analyses
- Provide a basic summary of the data.
- Use confidence intervals and/or hypothesis tests to compare tooth growth by supp and dose. (Only use the techniques from class, even if there's other approaches worth considering)
- State your conclusions and the assumptions needed for your conclusions.

Some criteria that you will be evaluated on

- Did you perform an exploratory data analysis of at least a single plot or table highlighting basic features of the data?
- Did the student perform some relevant confidence intervals and/or tests?
- Were the results of the tests and/or intervals interpreted in the context of the problem correctly?
- Did the student describe the assumptions needed for their conclusions?

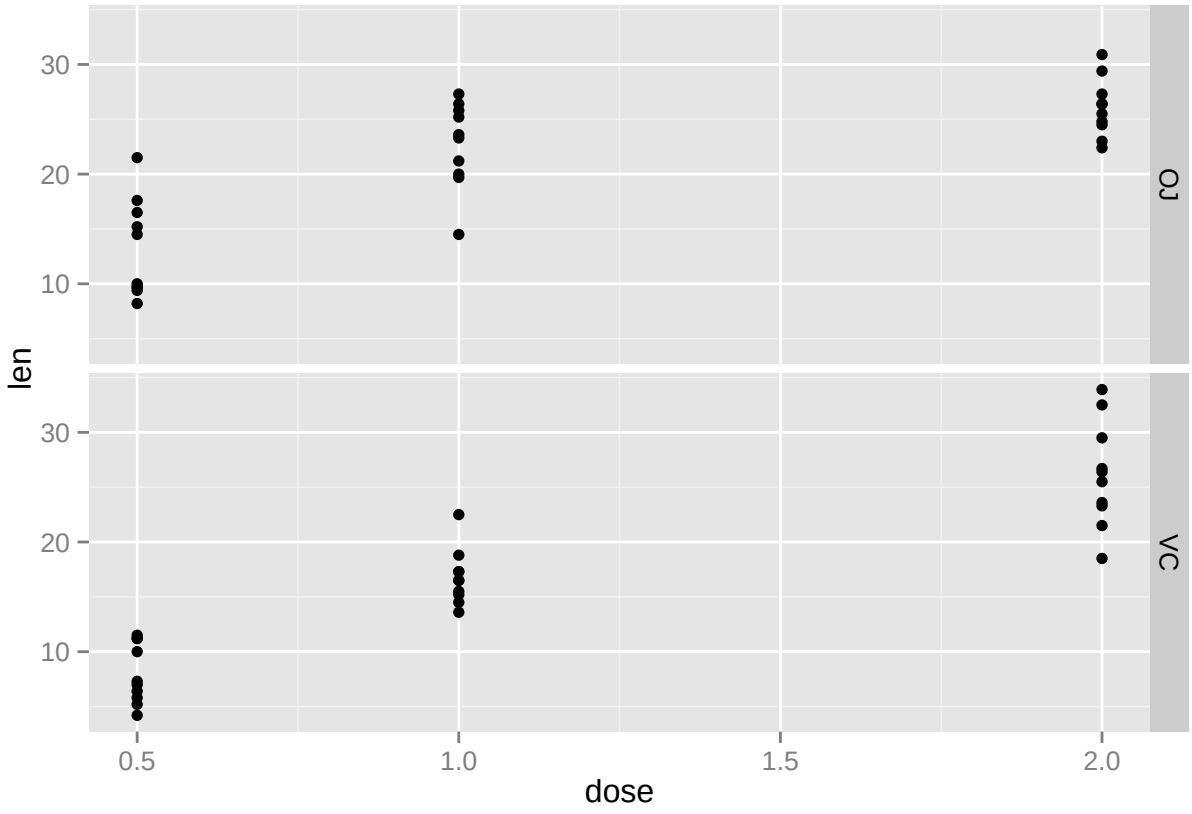
Loading the data

```
# Load libraries
library(ggplot2)
library(dplyr)
library(knitr)

# Load dataset
library(datasets)
data(ToothGrowth)
a<-(ToothGrowth) #give it easily typed name
```

EDA

```
ggplot(a, aes(y=len, x=dose, group=supp)) + geom_point() + facet_grid(supp~.)
```




```
a_tab<-group_by(a, supp, dose) %>% summarise(mean(len))
kable(x=a_tab, digits=1, align="c", caption="Summary table of data")
```

Table 1: Summary table of data

supp	dose	mean(len)
OJ	0.5	13.2
OJ	1.0	22.7
OJ	2.0	26.1
VC	0.5	8.0
VC	1.0	16.8
VC	2.0	26.1