Tooth Growth - Appendix

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This appendix describes the code required to reproduce the analysis in the course project on tooth growth.

data(ToothGrowth)  
attach(ToothGrowth)  
summary(ToothGrowth)

Plotting all data

boxplot(len~supp\*dose,xlab="Dose and Supplement",main="Tooth Growth",col=c("Red","Blue"))

Plotting via supplement

boxplot(len~supp,col=c("Red","Blue"),outline = FALSE,xlab="Supplement")

Supplement t-test

hist(len[supp=="OJ"])  
hist(len[supp=="VC"])  
var(len[supp=="VC"])/var(len[supp=="OJ"])  
t.test(len[supp=="OJ"],len[supp=="VC"],conf.level=0.95,alternative="greater")

Plotting via dose

boxplot(len~dose,xlab="Dose",col=c("Light Blue","Blue","Dark Blue"))

t-tests for dose

var(len[dose==0.5])/var(len[dose==2])#assumption checking  
t.test(len[dose==1],len[dose==0.5],conf.level=1-0.05/2,alternative="greater")  
t.test(len[dose==2],len[dose==1],conf.level=1-0.05/2,alternative="greater")