Classlab5: Histograms, boxplots and stem-leaf

Q1) Use read.csv to read in the wolf dataset from the class folder on the P drive.

Make a wolf.sub dataframe which is like the one used in class (i.e., only populations 1 and 2) and make a new factor called ‘hunting’ with levels ‘Light’ and ‘Heavy’( population 1 is light and population 2 is heavy)

Now get rid of the empty ‘U’ factor for Sex using:

wolf.sub=droplevels(subset(wolf.sub, Sex!='U'))

# for simplicity in functions, set up variable names:

Sex=wolf.sub$Sex

Population=wolf.sub$Population

Colour=wolf.sub$Colour

Cpgmg=wolf.sub$Cpgmg

Hunting=wolf.sub$Hunting

Q2) Make two histograms of Cortisol levels (Cpgmg) in 1) ‘Light’ and 2) ‘Heavy’ hunted. Put these histograms side by side (you will need par(mfrow=c(1,2)), and label the plots with xlab=’Heavily Hunted’ (or ‘Lightly Hunted’) and use a title ‘Cortisol in Wolves’.

Q3) Make a variable col=wolf.sub$Colour and make a table of that variable.

Now make a boxplot for Cortisol with the following boxes, in this order:

female & Dark; male & Dark; female & Light (i.e. ‘W’); male & Light.

Using boxplot (Cpgmg ~ Sex + col)

Now redo it, adding names=c('F-Dark’,’M-Dark’,’F-Light’,’M-Light’).

Now recall we can change the order of a factor:

Sex\_new=ordered(Sex,levels=c('M','F'))

Re-do the boxplot, using that new variable and leaving out ‘names’, and see that the order has changed.