Practical 6: Finding locations and Plotting

Due Tuesday 18/10/09 at 3pm (put your code and output in a word document, save it to your T:drive account and submit hardcopy in Tuesday practical section)

Q1) Use getwd to find the current working directory.

Now set the working directory to the P drive and your own folder with setwd().

FengYun and XiangYu: can you see if this works? Can they get to the Z directory? Is it the same as the original directory? Please make sure that the directory can change-

Q2) make a vector called vec=c(seq(2,30,3),NA). (Look up help on the function ‘seq’- no need to show anything for the help file).

Using the function is.na() set the NA value to 32.

Q3) Using the function par and the argument ‘mfrow’ make a plot window that has 4 quadrants.

We will use the R datset ‘Orange’.

Print out the first 5 lines of Orange (using ‘head’)

Now use the ‘nrow’ function to see how many data observations are in the dataset.

There are 5 different trees studied in this dataset. We will only consider trees 1 to 4 (to use the 4 plot spaces).

Set new variables from the dataframe as follows:

circ=Orange$circumference

age=Orange$age

tree=Orange$Tree

For trees 1,2,3 and 4:

Plot the age (x-variable) against circumference (y-variable).

Put the title ‘Orange Tree 1’ on your plot for the first tree (using main=), and change the name for each plot to reflect which tree the plot corresponds to. Similarly, colour the plots (using col=) so that tree 1 has colour black, tree 2 has colour red, tree 3 has colour green and tree 4 has colour blue. Put the x label ‘Age in Days’ and y label ‘Circumference’ on the axes using xlab and ylab.

(Hint: to get data for tree1 etc use sub-setting: plot(circ[tree==1],age[tree==1]) (you will need to add the other necessary parameters to the plot.)