Intro to R - General Ecology

Name:

9/18/2019

1. What is the difference between using the [] and [[]] operators and when do you use each?
2. Use R to calculate the result of the square root of your birthdate, where birthdate is year+month+date. Show the code and answer in your document.Tip, type ?sqrt() in the console first
3. Create a vector x with each of the numbers on your birthdate and a vector y that is x squared. Type the code you used to make this.
4. Create a dataframe with the two vectors from Question 3 and assign a name to it.
5. Plot the results and modify all the labels. Include the plot into your word document.
6. Use the ? operator or the help() function to look up the following functions: mean(), sd(), min(), max(), length() and in your own words describe what these functions do.
7. Install and load the ggplot2 package, or the tidyverse package. What commands do you use for this action?
8. Download the spreadsheet we filled out in class as a csv file and import it to your R session. Remember that to find the file and save things in the right place you need to set your working directory. To import you can use the read.csv() function.

For figures, make sure you include axis labels, units and titles.Using ggplot() create the following new figures:

1. A distribution of the class heights. Use geom\_histogram()
2. A scatter plot of month and day of birth, colored by whether or not they like dogs. Tip: for the scatter plot you can use geom\_point() and to color you can use fill = in the aes() of ggplot
3. A bar plot for people’s favorite colors.