Level Up – Advanced exercises

Exercise 1 (using help from Exercise 2)

Generate two vectors of the same length:

x is normally distributed with a mean of 0 and a standard deviation of 1.

y is uniformly distributed with a range between 0 & 1.

Exercise 3

Read in "Peru_Soil_Data_Problematic.txt" with `read.table()`. If it doesn't work, check the help file. If it does work, has all the data read in properly?

Explore `read_delim()` in the `readr` package – does this offer more flexibility? Print the table – do you like this format? (If so, feel free to use it 😊)

Exercise 4

Explore the `group_by()` and `summarise()` function in dplyr using ? or a search engine. Use these functions to create a data frame with the mean Phosphorus and Calcium measures for each habitat.

There was a problem with the device measuring the Calcium concentrations in Los Amigos. Can you multiply *only* these data points by two?

Exercise 5

For the Magnesium-Calcium plot, can you orientate the x axis labels to 90 degrees using theme()? Can you rescale the y axis to run from 0 to 200?

For the Magnesium-Calcium plot facetted by Habitat, can you change the axis so that the scales are not fixed on each facet (i.e. the scales are different and not the maxima of the entire plot area)? Hint - look at the specifications in `facet_wrap()`.