

## Assignment 1.12 – Factors and Special Values

Write a R script that provides answers to the following questions. If any questions need direct answers, give them in a comment.

1. Load the data set **InsectSprays**. How many levels does the column **spray** have? What are the levels? Are they ordered or unordered?
2. Make a vector that contains the names of seven fruits, some that you like and some that you don't. Name it **fruits**.
  - a. Convert **fruits** into a vector of unordered factors. What levels are in **fruits** now?
  - b. Create another vector that describes the color of each of these fruits named **fruit.colors**. Be sure that the colors in the same order as **fruits** so that they match up. Convert this vector into unordered factors.
  - c. Now create a third vector that rates your preference for each fruit in **fruits**. Ratings can be up to you, but they should be ordered (like good, better, best) and contain at least 3 rankings. Convert this vector into ordered factors.
  - d. Now, bind all three factored vectors together into a data frame named **fruit.info**. Be sure each column has a good name!
3. Load the data set **airquality**.
  - a. Does this data set contain missing values?
  - b. How many missing values are there in each of the data columns (**Ozone**, **Solar.R**, **Wind**)?
  - c. Produce a data frame **airquality.cleaned** that removes all observations (rows) with missing data.
4. Give a quick explanation of what each special value means:
  - a. **Inf**
  - b. **NA**
  - c. **NaN**

Turn in your R script.