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.

a. Load the data set `InsectSprays`. How many levels does the column count have? What are the levels? Are they ordered or unordered?

b. Make a vector that contains the names of seven fruits, some that you like and some that you don't. Name it `fruits`.

    b.1. Convert `fruits` into a vector of unordered factors. What levels are in `fruits` now?

    b.2. 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.

    b.3. 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.

    b.4. Now, bind all three factored vectors together into a data frame named `fruit.info`. Be sure each column has a good name!

    b.5. Add a fruit to your *data frame* that you haven't yet tried. Look up the color, but put `NA` for the preference.

c. Load the data set `airquality`.

    c.1. Does this data set contain missing values?

    c.2. How many missing values are there in each of the data columns (`Ozone`, `Solar.R`, `Wind`)?

    c.3. Produce a data frame `airquality.cleaned` that removes all observations (rows) with missing data.

Turn in your R script.