

# Lecture 1.9 – Factors, Special Values, and Class Coercion

## Specific Learning Objectives:

1.1.9 – Create vectors, arrays, matrices, lists, and data frames.

1.1.10 – Understand vectors and vectorized calculations.

1.1.11 – Understand the data classes of R.

1.1.12 – Learn how to index vectors, arrays, matrices, lists, and data frames.

# Check Your Understanding

**Create a data frame that contains:**

- a column of class character describing something in your current surroundings**
- a column of class factor describing the color of those items**

# Check Your Understanding

What would you do in the following scenarios?

- a) You have a data set in a data frame. It is very large, and you want to know whether or not it has missing data values. You'd also like to remove those values so that you only have a set of complete observations.
  
- b) You have a data frame in which you use your own function with vectorized calculations. When you look at the output, it is `NULL`. What has happened? What should you do?

# Check Your Understanding

**Which command can accomplish the following coercions:**

- a) a logical vector into a numeric vector**
- b) a numeric vector into a character vector**
- c) two vectors into a data frame**
- d) a list into a vector**

# Check Your Understanding

1. Old Assignment questions
2. Assignments 1.12 and 1.13

# Action Items

- 1. Complete Assignments 1.12 and 1.13.**
- 2. Prepare for your first Skill Check!**