Lecture 1.5 – Types of Data in R

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!

Write out an example of each of the five atomic data classes!

Check Your Understanding!

Will the following line of code work without an error?

```
mean(c(T, F, F, F, T, T, T, F))
```

Correct answer

a) Yes!

a) No!

Write about why this is true.

Check Your Understanding!

Assign the following value to a:

```
a <- "y"
```

What class is object `a` and how can you test this to make sure?

a) numeric
`is.numeric(a)`

Correct answer

c) character
`is.character(a)`

b) logical
`is.logical(a)`

d) complex
`is.complex(a)`

What is R's output if you tried a, b, or d?

In-class exercises

1. **Davies Exercise 4.1 a (only).**
2. **Davies Exercise 4.2 a - d.**
3. **Davies Exercise 4.3 a and d (only).**

Action Items

1. **Complete assignment 1.6.**
2. **Read Davies Ch. 2 for next time.**