Lecture 3.5 – Looping

Specific Learning Objectives:

1.2.1 – Understand the way computers execute commands.

1.2.6 – Understand and successfully execute a while loop.

1.2.8 – Understand and successfully execute repeat and for loops.

3.5 – Think and work independently with code.

Check Your Understanding

Write a `repeat` loop that prints the value of the repetition and stops after 100 repetitions.

Check Your Understanding

The Fibonacci sequence is a series of numbers in which each number in the series is defined by adding the previous two numbers in the sequence. The first two Fibonacci numbers are 0 and 1, then 1, then 2, then 3, etc.

Write a loop that will calculate the first 500 Fibonacci numbers. I've gotten you started with the first four numbers in the Lecture Notebook!

```
Fib.nums <- rep(NA, length = 500)
Fib.nums[1:2] <- c(0, 1)
Fib.nums[3] <- Fib.nums[1] + Fib.nums[2]
Fib.nums[4] <- Fib.nums[2] + Fib.nums[3]
```

In-class Exercises

1. **Complete Assignment 3.4.**

Action Items

1. **Complete Assignment 3.4.**

2. **Read Davies Ch. 10.3 for next time.**