Julian Burgoff

9/14/22

**Environmental Data Lab** 

Lab 1

- 1. R ran the top line of code and combined the values within c() into a list. The bottom line of code was in quotations which R treats as a character, and thus printed the same line of code.
- 2. I would say c\_1 is a variable that contains the function c(1,2,3). It pops up as a value in the right panel of R as num 1:3.
- 3. I would say  $c_2$  is a variable that contains the character "c(1,2,3)". It pops up as a value of "c(1,2,3)".
- 4. They have different values because one is phrased as a function (c\_1) and one as a character (c\_2).
- 5. Three rows, two columns.

```
6. colnames(mat_1)<- c("C1", "C2")</li>
> rownames(mat_1)<- c("R1", "R2", "R3")</li>
> value_3<- mat_1["R3", "C1"]</li>
> print(value_3)
[1] 3
```

7. > mat\_2= matrix(my\_vec, nrow=2)

```
> View(mat 2)
```

8. > mat\_3 = matrix(my\_vec, nrow = 3)

```
> View(mat_3)
```

9. Columns

10. > mat\_4<- matrix(my\_vec, nrow=2, ncol=4)

Warning message:

```
In matrix(my_vec, nrow = 2, ncol = 4):
```

data length [6] is not a sub-multiple or multiple of the number of columns [4]

```
> View(mat 4)
```

- 11. Since the matrix had 2 rows and 4 columns, but only 6 values, it filled in the last column with values " 1, 2".
- 12. my\_list\_1[[1]] returned "5.2". R found it because the code tells it to take the first value of the list my\_list\_1[[as.numeric("1")]] returned "5.2".

I got errors for the rest of lines of code.