

Working with Missing Values and Iterations

```
library(tidyverse)
library(usdata)
```

1. This problem uses the `county_complete` dataset.
 - a. Create a subset of data with columns that ends with “2019”. Use the function `select` along with `ends_with` function to accomplish this task. Convert the subset into a tibble and print it out.
 - b. How many missing values are there in the variable `poverty_2019`?
 - c. (Bonus) How many missing values are there in any variable?

2. Use for-loop to *show* the following series or sequences.

- a. A geometric series:

$$\sum_{i=0}^{1000} (-1)^i \left(\frac{2}{3}\right)^i = \frac{3}{5}$$

- b. (Bonus) First 10 numbers of the Fibonacci Sequence: You may use a combination of if-else, for-loop, and/or indices.

$$F_0 = 0, F_1 = 1$$

$$F_n = F_{n-1} + F_{n-2}$$

The Sequence

$$F_0 = 0$$

$$F_1 = 1$$

$$F_2 = 1$$

$$F_3 = 2$$

$$F_4 = 3$$

$$F_5 = 5$$

$$F_6 = 8$$

$$F_7 = 13$$

$$F_8 = 21$$

$$F_9 = 34$$
