

Exercise: Control Flow

Day 4, Part A

1. There is a series of files containing different years of data on income and poverty in Washington state (“data/wa_income_[year]”). Load and combine all of the data in these files into a single data frame. Hint: this requires just one loop combined with some `if/else` statements.
2. Make a line plot of median household income (y-axis) vs year (x-axis) for each county, saving these as separate pages in a PDF. Hint: the `unique()` function is useful for finding all the unique values of a vector.
3. Using a loop, calculate the mean poverty rate in each year. Do the same using `dcast()` and compare your results.

Bonus:

4. Using the `microbenchmark()` function in the `microbenchmark` library, determine which of the two approaches in question 3 is faster, and by how much. Which approach do you prefer? Is the difference in timing enough to sway your opinion? Hint: <https://www.r-bloggers.com/5-ways-to-measure-running-time-of-r-code/> has some helpful examples of using `microbenchmark()`.