TOOLBOX TUESDAY JUNE 7, 2022: CENSUS AND AMERICAN COMMUNITY SURVEY DATA USING THE R STATISTICAL PROGRAMMING LANGUAGE Q&A

- What's the difference between read_csv and read.csv?
 - Read.csv() is the correct function
- Can you use any names? Are there reserved words?
 - o Commands or functions should be avoided, and names should not begin with a number
- What's the difference between R and RStudio?
 - RStudio is more interactive and user-friendly. For instance, RStudio automatically color coded your code to distinguish between comments, functions, and variables
- How can you identify column properties such as character or number?
 - o Use summary() function
- When making a new data frame, do you need to use a comma if you aren't including columns?
 - Yes, you'll need to include a comma such as this example: data2[1:10,]
- Can you color the dots differently for each country?
 - Suggest checking the resources in the course code's "preamble" or a google search.
 - Do you have a dataset for teleworking and migration?
 - You may use R to access Census API and extract necessary variables for your project such as ACS work-from-home commute mode. At the end of our script, it shows you how to do this
- Does it leave blank if the county is missing from one file?
 - o It'll say it in the summary
- Can we combine two data set into one?
 - Missing value code for R is na
 - There's a command call "cbind" but there's a risk in using this than using 'match' command since (i) your data rows do not need to be in order for match to work, and (ii) you can have different lengths of data; for example, you can join a dataset of US counties (n=3300) directly to a dataset of California counties (n=58)
- There seems to be a lot of issues with installing packages.
 - This is due to computer settings and connectivity to the package's server. The best way is to (i) restart your R and (ii) retry installing the packages
- Can R choose patterns in maps & bar graphs?
 - Colors are hard to distinguish in b/w printed copy.
 - Yes, but we recommend doing that in ArcGIS.
- Are you going to show how to get 2020 census data? I've only worked with ACS and was having trouble getting Census.
 - Yes, you can access any publicly available datasets from the census the tidycensus package has get_decennial and get_acs commands see <u>https://walker-data.com/tidycensus/</u>.
- I noticed if I click to the left of the line number, a red dot appears. Are these bookmarks? Is it possible to create and jump to bookmarks?
 - Red dot serves as a breakpoint for debugging.
- Does writing automatically overwrite a file with the same name, or does it create an error?
 - For .shp, you can't overwrite. For .csv, you can yes re-running will overwrite the prior data. That's generally part of the workflow in r and you will see it a lot in the sample script