

## Claire Lawrence- Assigned U.S.Congress (2)

### What I did:

- Loaded the raw election dataset (`iowa_2014_precinct_database.csv`) into Python using pandas.
- Filtered the data to only include US Congress races using the `RaceTitle` column. Used `.str.startswith("U.S. Rep")` because the dataset had district numbers in the title (Dist. 1–4).
- Standardized party names because the dataset used full names like "Republican Party" and "Democratic Party", but the dashboard requires specific labels. Mapped party names to: Republican, Democratic, Libertarian, or Other.
- Aggregated vote totals by:
  - precinct (`shp_idx`)
  - congressional district (`congress_district`)
  - candidate
- Calculated:
  - Republican vote share
  - two-party vote share
  - total votes per precinct.
- Built three JSON outputs:
  - precinct Republican share for map colors
  - district-level candidate totals
  - precinct-level candidate totals.
- Converted precinct and district IDs to strings because the dashboard requires string keys.
- Exported the files to the `dashboard_data` folder and tested them in the dashboard.

### Issues I faced:

- Figuring out how to structure the JSON format correctly  
At first it was confusing how the dashboard expected nested JSON objects (district -> candidates -> vote totals). It took some trial and error to match the example format exactly and make sure the keys and structure matched what the dashboard was reading.
- Making sure identifiers matched the dashboard requirements  
The dashboard requires precinct and district IDs to be strings instead of numbers. At first the files used numeric values, which caused issues with the dashboard loading the data correctly, so they had to be converted to strings.
- Overall, I had to reference the senate example often because I am not used to coding in python, but I think I ended up in the right spot.