

1. Download the candidate, constituency and count details files from Brightspace. This exercise will merge the three files and plot graphs from it in the following steps.
2. Using the candidate csv, load the data into a data frame called canddf (Please note, because of the accents (e.g. Eamon Ó Cuiv), you will need to use a latin1 file encoding). Check if you need to change anything else.
 - a. Display the Surname and First.Name of candidates from the Wexford constituency.
 - b. How many candidates are there in the Laois constituency?
 - c. How many constituencies are there?
3. Download the Constituency details file from Brightspace, load it into a dataframe called constdf.
 - a. How many constituencies are there in this source?
4. Assuming the constituency source is correct, look at the data and make a decision about any inconsistencies.
5. Using the count csv, load the data into a data frame called countdf.
 - a. How many candidates are there in the Laois constituency according to countdf?
6. Check the constituency data for consistency with the new count data. If you find inconsistencies, make a decision on how you will handle them.
7. Check the candidate data for consistency with the count data.
8. Merge the data sources as you see fit, to end up with a new data frame df, with columns: Candidate.First.Name, Candidate.surname, Constituency.Name, Constituency.Number, Count.Number, Gender, Number.Of.Candidates, Number.of.Seats, Party.Abbreviation, Party, Quota, Result, Seats.in.Constituency, Total.Votes, Votes
9. Write a function that takes a parameter of the constituency name and returns a dataframe with the candidate's first and surnames, the constituency name, gender, party and party abbreviation for all elected candidates in that constituency.
10. Using df, create plots to show the solutions to the following:
 - a. In a constituency (pick one), show the spread of elected candidates across the parties.

- b. Treating the top 5 parties as individual parties and the remaining parties as 'other', repeat the exercise from part a.
- c. Across all constituencies, show the number of candidates from each party that was elected.