Hands-on Project

Submission instructions:

- Upload a .Rmd file, and the corresponding HTML file to Moodle
- One person of your team should upload the corresponding files on Moodle
- You should list your team members at the top of your file
- There is no need to show warning and messages for each of the chunk in your file, so you might want to include {r message=FALSE, warning=FALSE} as part of your chunk definition.

Project description:

You have received the "Get_to_know_survey_2022.csv" file, and you need to do some data manipulation in order to show a summary of the results collected in the file.

After loading the data into R, you notice a few inconsistencies in the data before you can summarize it. The following objectives will help you to solve some of those inconsistencies:

- 1. Create a new column called Birth_Month which has only the month portion of Birth Month Year.
- 2. Create a new column called Birth Year which has only the year portion of Birth Month Year.
- 3. Since the birth month and birth year were open ended fields, there are many inconsistencies in the data. Standardize the values for Birth_Month and Birth_Year.
- 4. Show the five most frequent birth months, and the five least frequent birth months.
- 5. Show the five most frequent birth years, and the five least frequent birth year.
- 6. The State column was also open ended, so there are many inconsistencies. Clean this column to eliminate any non-US state, and to standardize the values for State.
- 7. Show the five most frequent states, and the five least frequent state.
- 8. Similar to State, the column Country needs to be standardized. Once you standardize it, show the five most frequent countries, and the five least frequent countries.
- 9. We want to clean the How_Hear_About_Program column by eliminating the number and any extra character portion in those responses (so we keep only the text portion). Show the five most frequent responses to this column.
- 10. We want to transform the data from wide to long on column Languages by duplicating the values of the other columns. You can use the comma as a separator for Languages. Show the five most frequent languages.