Interview Data Analysis Challenge

Site Source
https://chart2000.com/about.htm

Data Version
0.3.0054
File titled `chart2000-songmonth-0-3-0054.csv`, included in zip file.

About the Data
This dataset pulls Billboard chart data across multiple countries from Jan 2000-Jun 2019 to create an aggregated scoring system to assess how popular music was worldwide in a given month. Each row in the chart represents a song's placement on the top music charts in one given month, including the artist, its aggregated score, and its position on the charts in various countries around the world.

Instructions
- Answer the questions below
- Please include your code and thought process used to navigate the questions below. Code is required for this exercise, and common scripting languages are preferable for solutions.
- Clear, concise, and thorough answers are appreciated. Assume that your audience cannot read or interpret a table, and that you need to present each answer in plain text

Rules
- Featured artists and combinations of artists are considered separate. For example, treat the artist of "Post Malone & Swae Lee" as different than "Post Malone" and "Swae Lee"
- The score is a metric developed by the data publisher to serve as a measure of how popular a given song was in a certain month.
- A "chart-month" is simply a row in the data that represents one song spending one month on the charts. For example, the song "Sucker" by the Jonas Brothers is represented in the data in four separate rows (Mar-Jun 2019), and as such, would have collected 4 chart-months
- If an artist has multiple songs on the chart simultaneously, it counts as multiple "chart-months" for that artist. For example, in April 2016, when Justin Bieber had three songs on the charts ("What Do You Mean?", "Sorry," and "Love Yourself"), this counts as three chart-months for him
- de = Germany, fr = France, ca = Canada, au = Australia

Questions

1)
    a) How many unique artists are represented in the charts?
    b) How many unique songs are represented?

2)
    a) What song has the highest one-month score of all time?
    b) What month was this?
    c) Who was the artist?

3) As I am writing this, I am listening to the song "Safe and Sound" by Capital Cities.
    a) How many months was this song on the charts in the United States?
    b) What was its peak US chart position?
    c) In what month did it achieve this peak US chart position?

4)
    a) Which artist has spent the most time on the charts as defined by chart-months?
    b) How many chart-months have they scored?

5) How many #1 hits does Drake have in Canada?

6) Which Lady Gaga song on the list did not chart in Australia?

7)
    a) In what month of her career did Ariana Grande have her highest-ever number of songs on the charts?
    b) In this month, how many songs did she chart?
    c) What were these songs ranked in the US, and which was the highest?

8)
    a) Which ten artists had the most unique songs make the charts between 2013 and 2017?
    b) Make a bar graph that includes each artist and how many songs they charted. Please label, title, and color your graph appropriately.