

Chapter 3 Homework

Due Date: 11/01/2023 5:00PM

Question 1: Select a singer who has 7 or more records. Choose three time periods from this singer's career. For example, early (first album), middle (3rd or 4th album), and now (latest album). From each album scrape as much data as possible for three songs including the lyrics. (10 points)

Question 2: For each selected album, draw a word cloud to represent the singer's top words. Reflect on the similarities and differences among the word clouds. (10 points)

Question 3: For each scraped song, perform a strongest emotion analysis from the lyrics. Based on your findings, to what extent you consider the results accurate? Describe (10 points)

Question 4: This is an explorative data analysis question. Use all your scraped data to identify what feature or features positively relate to the popularity of your selected singer's songs. Explain your findings via scatter plots or some other form of visualization. (20 points)

Question 5: Which songs from your scraped lyrics have the highest positive sentiment and lowest negative sentiment scores? Do the findings at hand make sense to you? Why or why? Explain (10 points)

Question 6: Many singers at different levels use explicit words in their songs. Use the following list or something similar <https://www.attsavings.com/resources/entertainment/top-music-artists-who-curse-the-most/> to compare and contrast how the explicit words relate or differ between any two singers. For example, Taylor Swift vs The Weeknd. (10 points)

Question 7: Select a singer who tends to use more explicit words in their songs. Scrape the lyrics of 5 different songs from different time points of this singer. Perform explicit word search on the lyrics. What are similarities and differences between the explicit words among the songs? Does the singer always use the same explicit words? (10 points)

Question 8: Record a short screen capture video (10 minutes maximum) to describe how you answered the questions above, where you faced challenges, and how you resolved them in an effective manner. (20 points)

Submission Format: Submit all your python files, csv files, excel file, word cloud images, and your reflection video to the relevant dropbox on canvas.