Introduction of lyrics talking robot

This is my GitHub link:
https://github.com/Bryce138675/NLP-mini-project-Minghao-Liang

1 Import and clean the library

- Import other python files and install some modules
- Open the file and clean the library
- Define some columns in the library

2 Daily greeting robot

Define a function to create the daily greeting robot and use the if function to catch the words which people input. And the robot will output some responses to communicate with people.

3 Introduce some information about music

- Use the input function to create a daily greeting
- Use the input function to introduce some information about different kinds of music which can help people learn some knowledge about music.

4 Find the components of the song

- Define a function to find lyrics by inputting the title of songs
- Define a function to find lyrics and songs by inputting the title of the album
- Define a function to find all the titles of albums by inputting the name of singers
- Define a function to find singers by inputting the title of songs and output the website Wikipedia and the website to play songs of the singer.

5 Analyze the emotions of lyrics

The text2emotion has been used to analyze the emotion of lyrics.

- Define a function to output the emotions of lyrics which is the title of songs people inputted by using the for loops.
- Define a function to analyze all the emotions of all lyrics in the library.

6 Find the most similar songs between two singers

- Create some libraries for all singers (Ariana Grande and Drake have been used in this example)
- Rename the lyrics column to "text" which can easily access it later
- Split into spaces for each document
- Load in lyrics and put them together
- Find the TFIDF values
- Get the similarity by using the cosine from the TFIDF values
- Find the most similar songs between the two singers.

7 Compare the emotions of the most similar songs

Compare the emotions of the most similar songs and find the relationship between the emotions and lyrics.