SPOTIFY
SONGS ANALYSIS

Analysing the trends in the world of music.

EXPLORATORY DATA ANALYSIS

01

TOP SONGS 2024

Top 10 Popular Songs from 1st January 2024 to 15th March 2024.

02

POPULAR SONGS OVER TIME

Popularity of Songs Over Time.

03

TREND OVER TIME

Daily rank of songs changing over the week.

EXPLORATORY DATA ANALYSIS

04

NON-EXPLICIT SONGS

Ratio of songs containing explicit and non-explicit content.

05

TOP 10 COMMON KEYS

Top 10 most common keys used in which the song is performed.

06

DANCEABILITY & ENERGY

Relationship between danceability and energy.

01 TOP SONGS 2024

Top 10 popular songs from 1st January 2024 to 15th March 2024 with the help of their snapshot dates, by calculating the mean of their popularity and filtering the top 10 songs out of the list

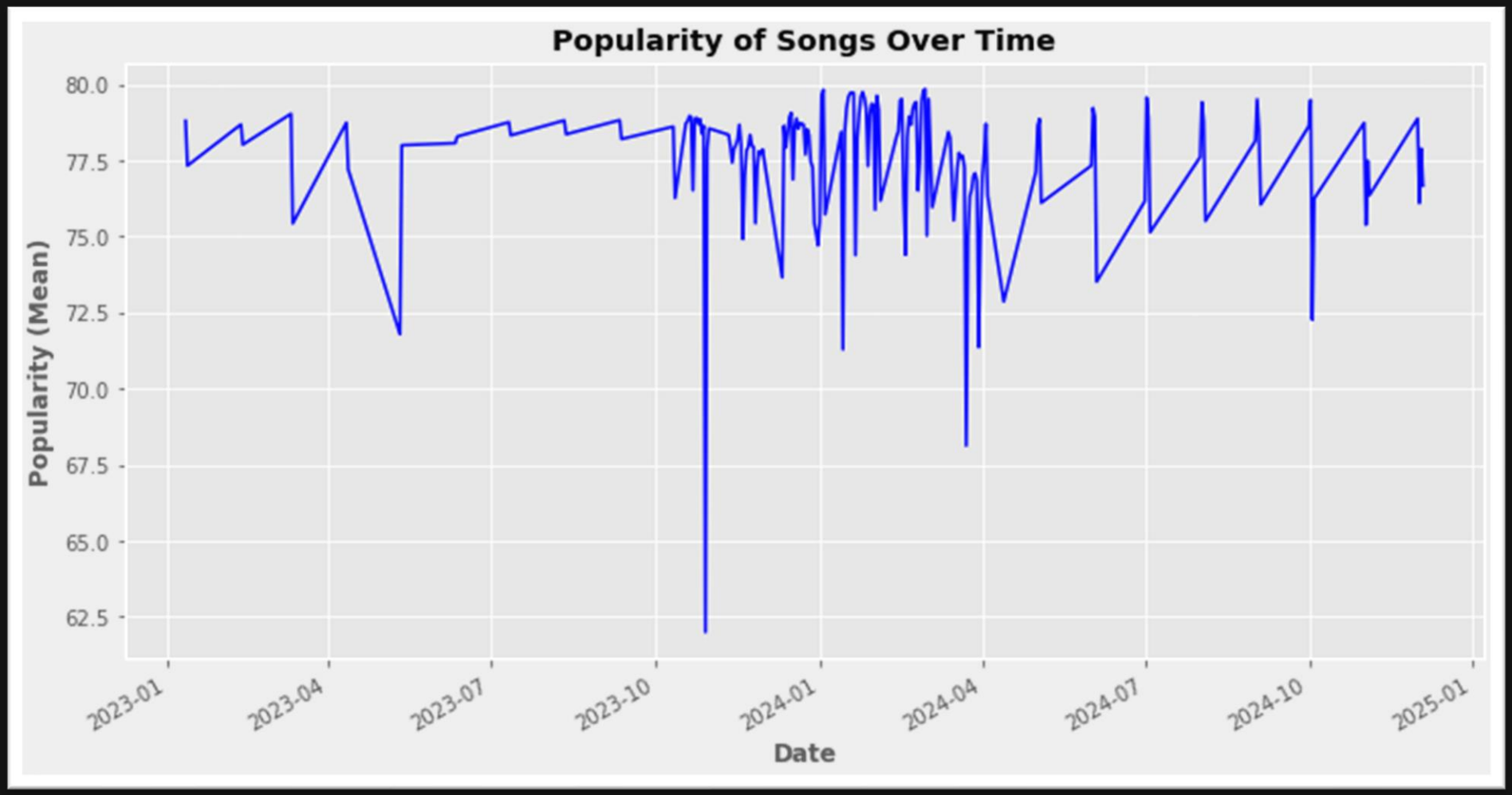
```
Top 10 Popular Songs from 1st January 2024 to 15th March 2024:
0      All I Want for Christmas Is You
1                                greedy
2                          Cruel Summer
3                 My Love Mine All Mine
4                           Lovin On Me
5    Rockin' Around The Christmas Tree
6                              La Diabla
7                           Stick Season
8                          Santa Tell Me
9                                  LUNA
Name: name, dtype: object
```

These are the top 10 popular songs from 1st January 2024 to 15th March 2024.

TOP SONGS

02 POPULAR SONGS OVER TIME

Plotting the popularity trends of songs over different dates to visualize how their rankings change over time.

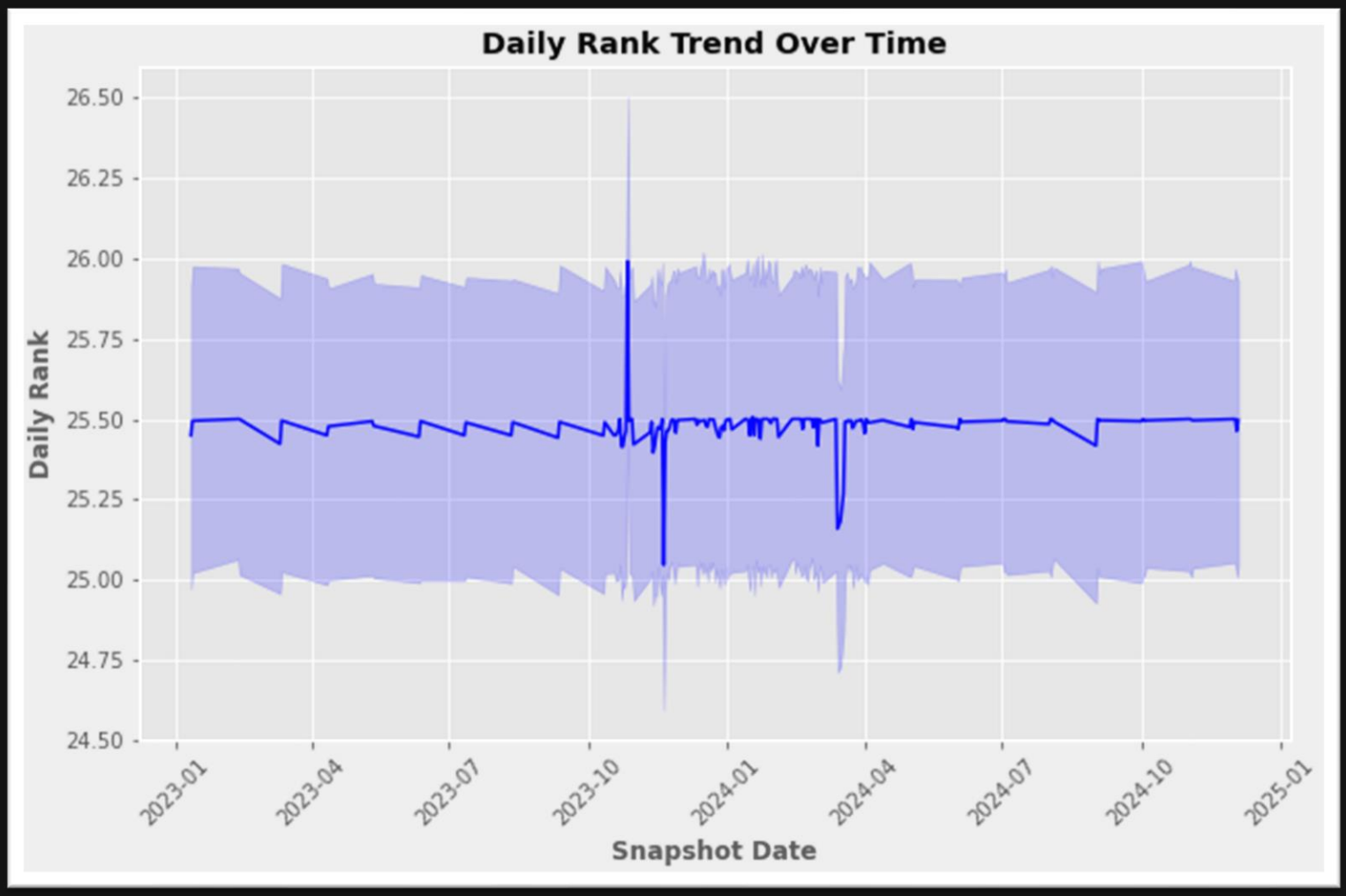


The popularity of songs were decreased in the period of 2023-10 to 2024-01.

POPULAR SONGS

03 TREND OVER TIME

Plotting Daily Ranking of songs over different snapshot dates.

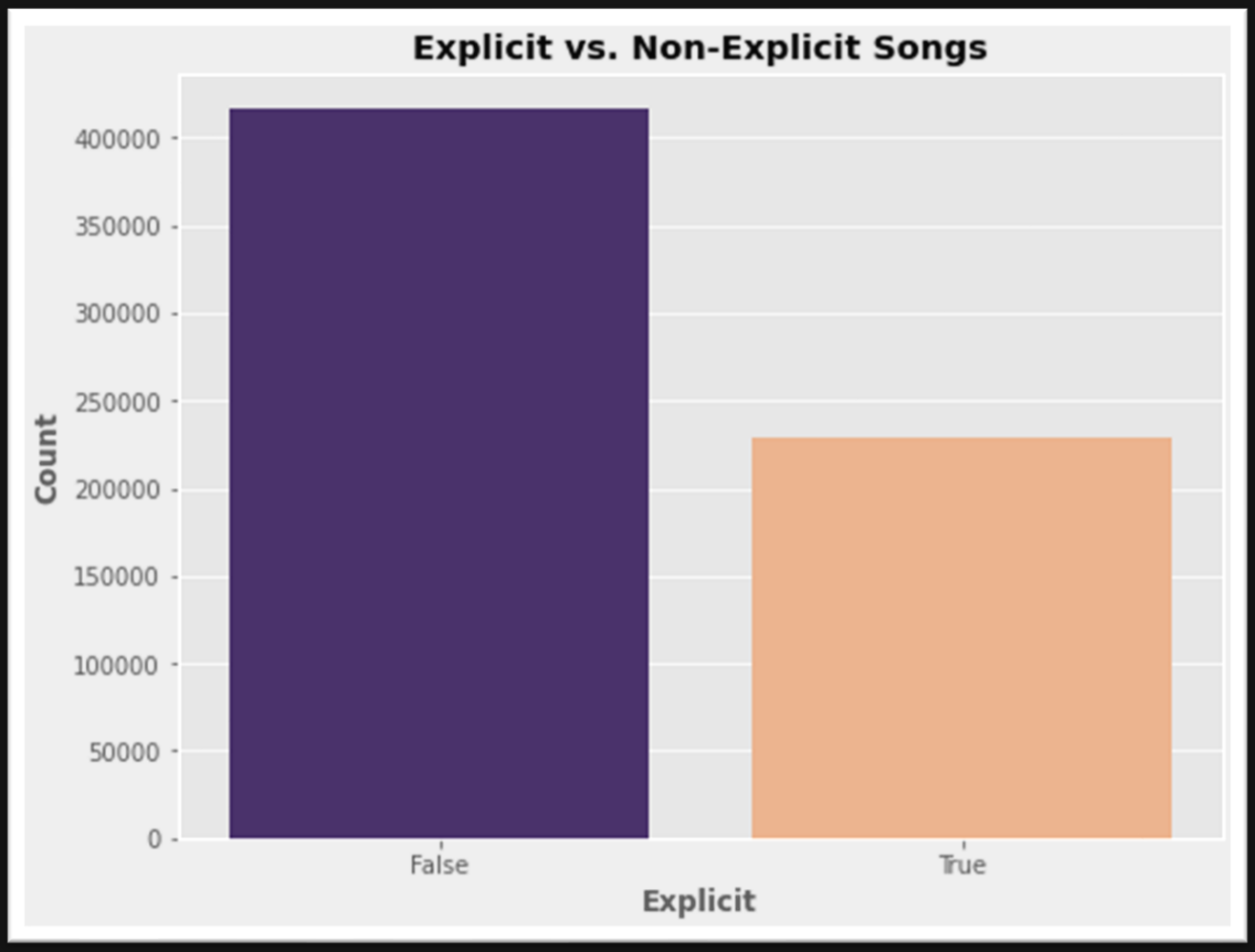


The major difference in daily ranking was between 2023-10 and 2024-01 as the highest peak and the lowest peak are there in this period of time.

TREND OVER TIME

04 NON-EXPLICIT SONGS

Comparing the songs that are explicit versus those that are not. i.e. whether the songs have explicit content or words or not.

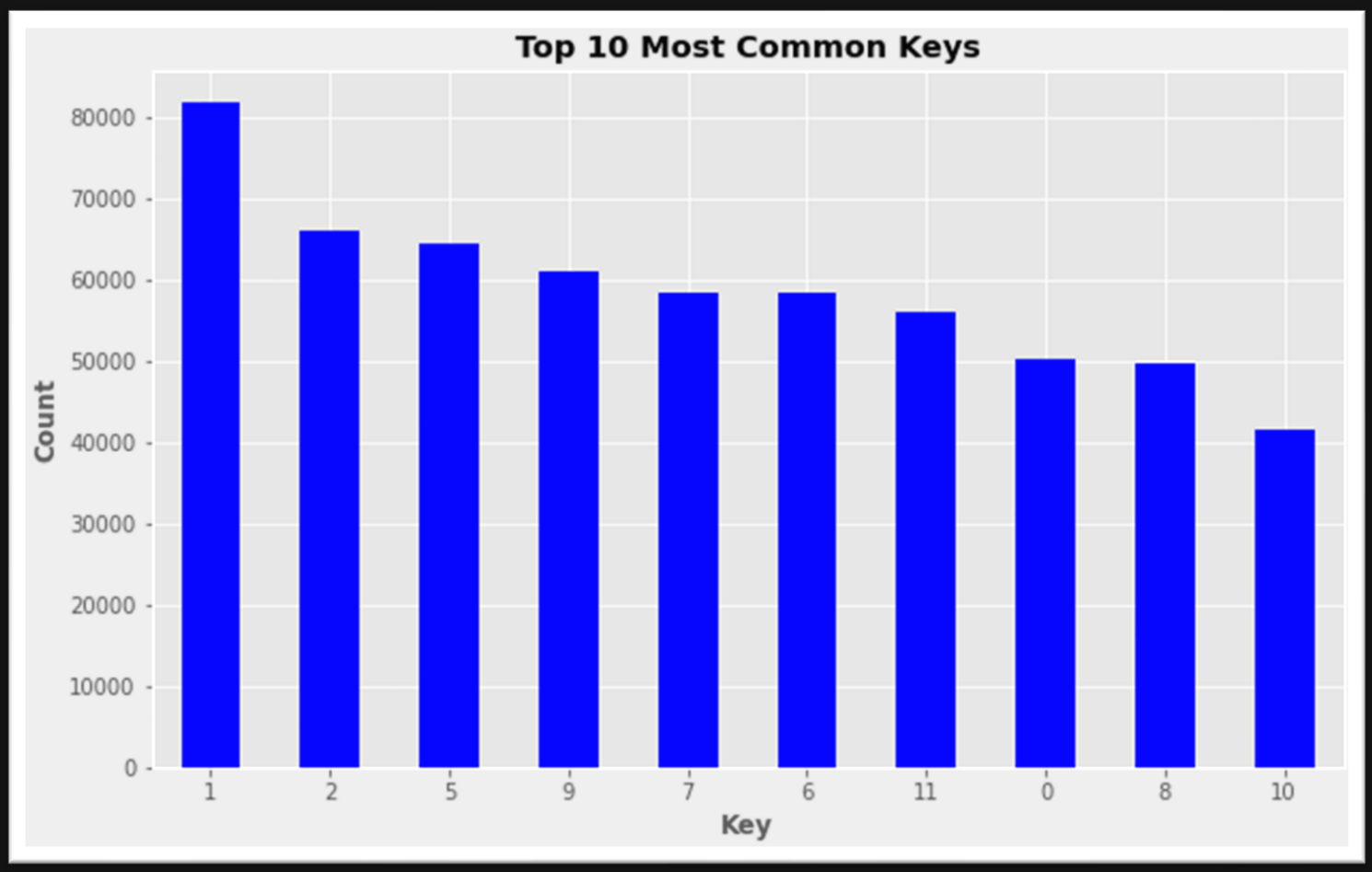


The number of non-explicit songs are more than explicit songs.

EXPLICITY

05 TOP 10 COMMON KEYS

Identifying most common keys in which the song is performed. [this column denotes the key in which the song is performed. Key values are numeric representations of musical keys (e.g., 0 = C, 1 = C#/Db, etc.).]



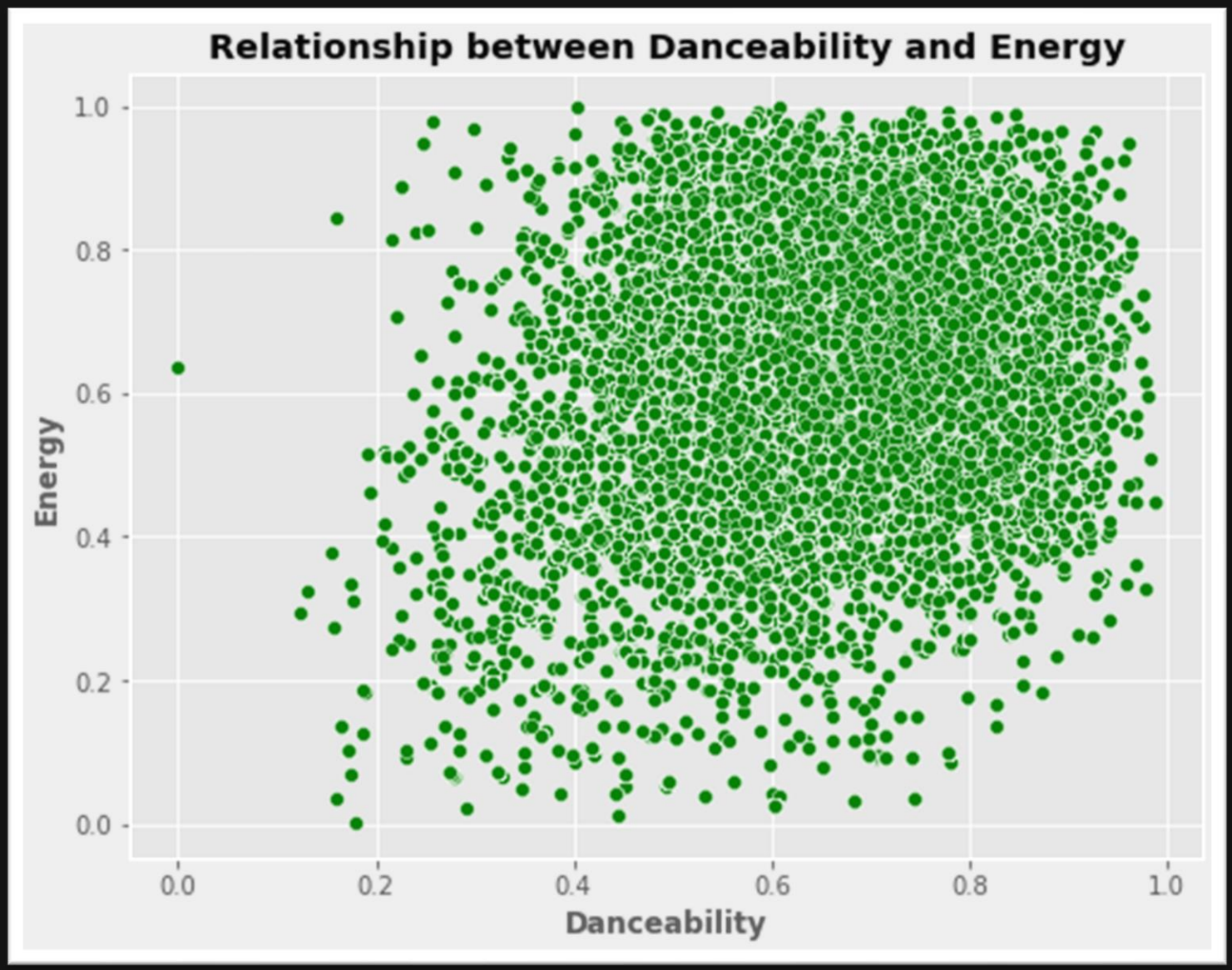
The key '1' is the mostly used key in music.

TOP KEYS

06

DANCEABILITY & ENERGY

Plotting the relation between danceability and energy in a song.



These two columns have positive correlation as the energy of a music will increase the danceability of that music.

CORRELATION

CONCLUSION

In conducting this comprehensive analysis of songs data from Spotify, we have gained valuable insights into various aspects of song popularity, characteristics, and trends. By leveraging Python libraries such as Pandas for data manipulation and Matplotlib (with customized styles like 'ggplot') for visualization, we have effectively explored patterns in daily rank fluctuations, identified influential factors such as explicit content, album release dates, and artist prominence, and examined correlations between musical attributes and rankings. This project not only deepened our understanding of music consumption behaviors across different countries but also demonstrated the power of data-driven approaches in uncovering actionable insights. Moving forward, these findings can inform strategic decisions in the music industry, guiding promotional efforts, content creation, and artist collaborations to enhance audience engagement and satisfaction.

SING ALONG