**WRITE UPS PER QUESTIONS**

* **What songs were most streamed in 2023?**

**(SONGS)** When analyzing the dataset, one of the research questions involved seeing which were the most streamed songs and who are the artists of each. Two particular songs seemed to significantly outperform the rest: The Weekend’s *Blinding Lights* and Ed Sheeran’s *Shape of You*. These songs set themselves apart from the rest by having at least 600 million more streams than the 3rd most streamed song: Lewis Capaldi’s *Someone You Loved*. Our recommendation would be to further evaluate these songs and try to implement what was done in each of those into a new release.

* **Which artists appeared most in the top songs of 2023 including collaborations?**

**(ARTIST)** When analyzing the dataset, one of the research questions involved seeing which artists were most popular based on the total number of songs in the list including collaborations. The top three most featured artists are Taylor Swift, The Weekend, and Bad Bunny. However, it appears through statistical analysis that Taylor Swift and The Weekend are in a separate class from the others appearing in about ten more songs than the third-place holder: Bad Bunny. Our recommendation would be to feature some of these artists in future songs as they are viewed as some of the best in the industry.

* **Which artists had the most total streams in 2023?**

**(ARTIST)** When analyzing the dataset, one of the research questions involved seeing which artists were most popular based on the total number of streams. The top three artists with these parameters are The Weekend, Taylor Swift, and Ed Sheeran with the fourth-place holder (Harry Styles) earning about 2 billion less streams than those three artists. Our recommendation would be to either sign these artists as they have been very successful or sign similar artists who can reach the same listeners.

* **What is the most popular streaming service based on appearances in playlists in 2023?**

When analyzing the dataset, one of the research questions involved seeing which streaming service is most popular based on the total amount of streamed songs. The results show that Spotify is by far the top streaming service according to number of playlists with a resounding 92% of total playlists being on their platform. Deezer and Apple split the remaining portion 7% and 1% respectively. This is valuable information as we would recommend targeting Spotify listeners in advertising efforts and events. Additionally, further analysis can be done using only Spotify data to help create new “top hits.”

* **When releasing a new song, which month will yield the highest number of streams?**

When analyzing the dataset, one of the research questions involved seeing which month(s) were best to release a new song to obtain the most streams. After analyzing the data, it appears that there is no ultra-superior month, but rather three months that outperformed the others. The top three months to release a new song are March, May, and December. Our recommendation would be to release new songs during these three months. It remains unclear why exactly these three months are the best when it comes t streaming, therefore we would recommend further investigation or research into why this might be.

* **Do songs with multiple artists perform better than solos?**

When analyzing the dataset, one of the research questions involved seeing if songs with multiple artists perform better than songs with solo artists based on total number of streams. According to statistical analysis, it appears that songs with solo artists perform much better than songs with multiple artists receiving just shy of two hundred million more streams. We would recommend releasing more solos as opposed to multi-artist collaborations.

* **What percent of all songs are in a major key compared to a minor key? (Pie chart)**

When analyzing the dataset, one of the research questions involved seeing what percent of songs are in a major key compared to a minor key. After analyzing the data, 58% of the top songs in 2023 were in a major key while only 42% were in a minor key. This could be useful information when deciding whether to produce a song or not. Our recommendation would be to produce more songs with a major key as the majority of top songs from 2023 were.

* **What characteristics do the most popular songs share?**

When analyzing the dataset, one of the research questions involved seeing what song characteristics were shared most among some of the best songs in 2023. Our analysis concluded that there was no correlation or very little correlation between beats per minute, danceability, and speechiness when compared to total streams. Therefore, when producing a new song, these factors may not be very important, and we should focus on other song characteristics that do appear to result in success.

**CLEANUP PROCESS**

•Removed duplicates in the dataset

•Dropped the songs with the lower streams

•Deleted a row with mushed data, a string was within the streams

•Changed the type for streams to integer

•There was missing data which we filled with NAN or “0” depending on if we needed objects or integers.

•Resolved an issue with duplicates. We dropped the row with the lesser number of streams.

•One row had a formatting issue with the data

•Counted the artist

**CONCLUSION**

Both established and up-and-coming record labels can utilize this dataset to identify the top competitors and current musical trends. This study demonstrated that the most advantageous trends could be followed from The Weekend's Blinding Lights that emerged as the most popular streaming song. These patterns include the key to utilize, the release window for the song, the platform to employ, etc. These trends all demonstrated how, by applying the research and analysis for the given data, we can use this knowledge to build the company’s success into 2024 and beyond.