

DSCI 510 Final Project

Analysing Audio Features & Spotify Song Popularity

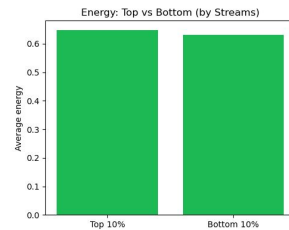
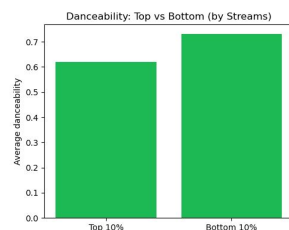
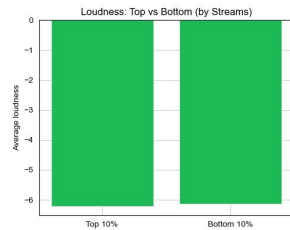
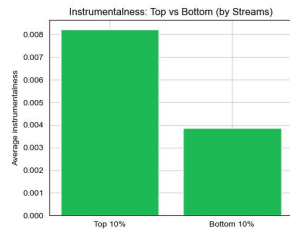
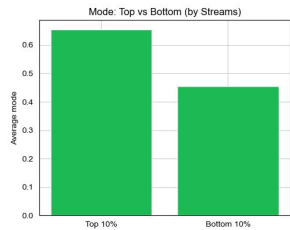
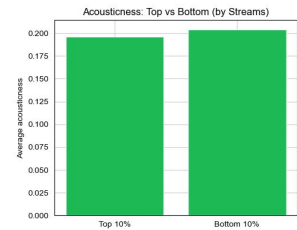
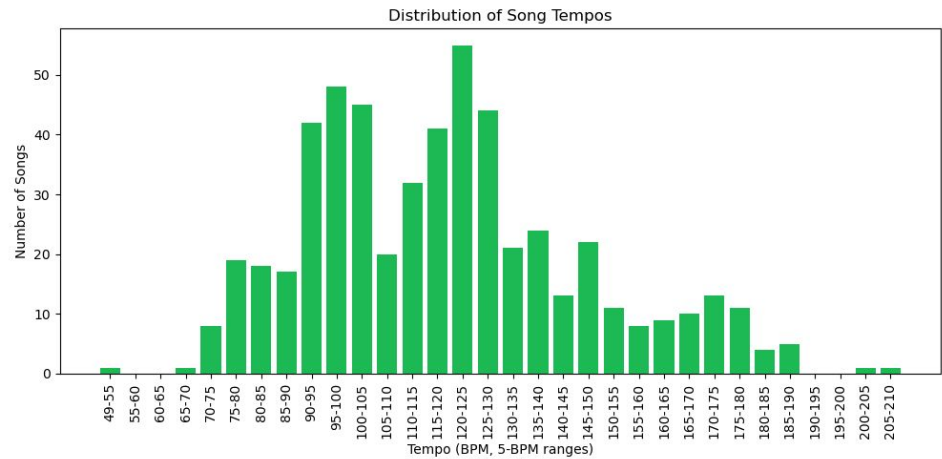
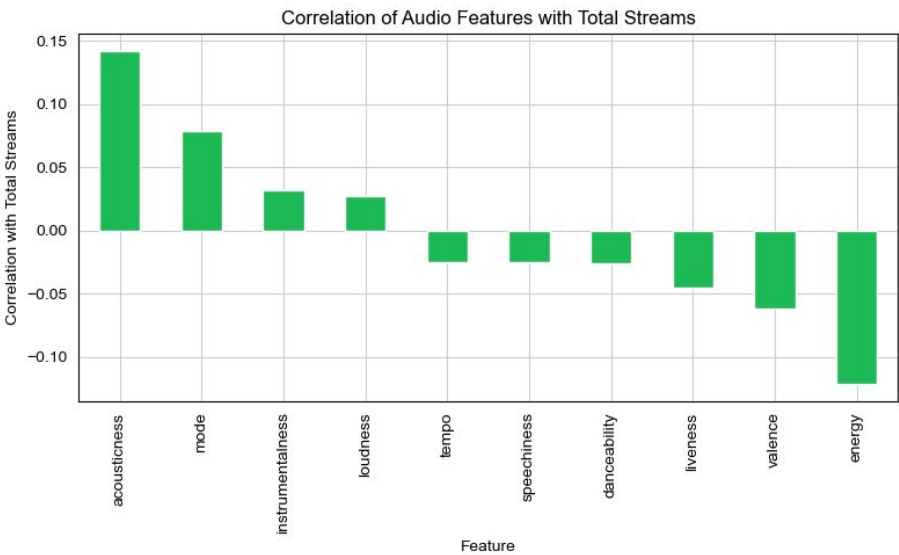
Victoria Dechamps



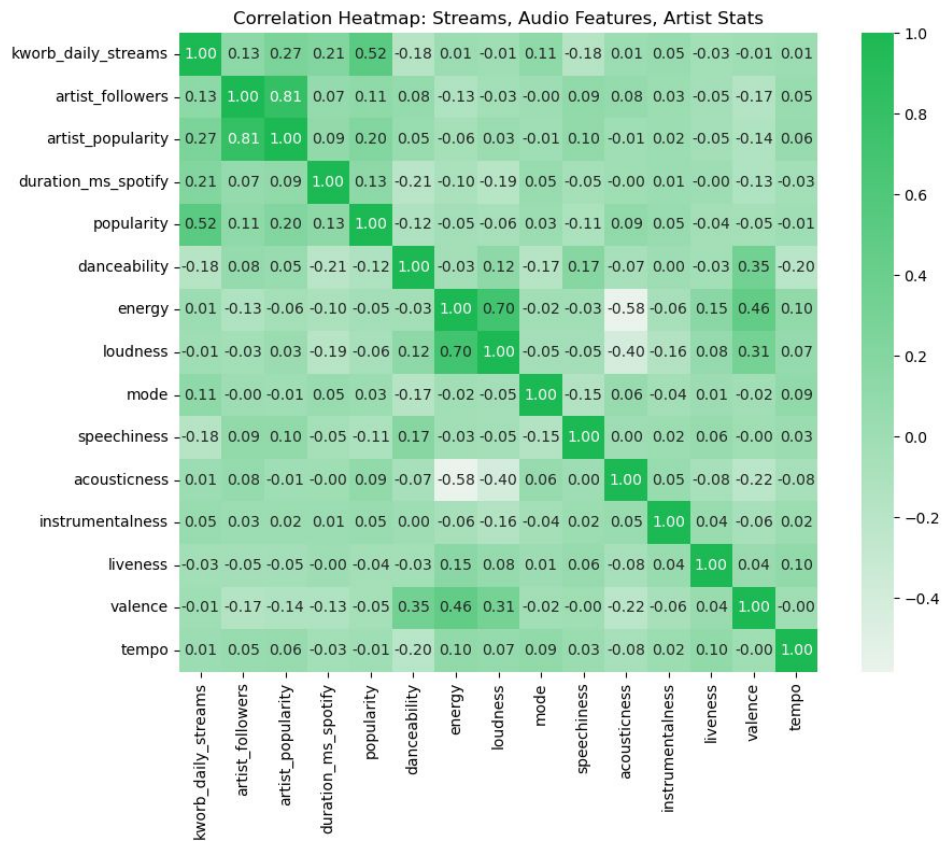
Data Sources

Data source	Name / short description	Source URL	Type	List of fields	Able to access/collect data with python?	Data retrieved // Dataset size
Spotify API	Spotify Web API	https://developer.spotify.com/	API	Popularity, track name, artist, album, release date, explicitly flag, duration	Yes	970 // ??
Kaggle	Audio features and lyrics of spotify songs	https://www.kaggle.com/datasets/imuhammad/audio-features-and-lyrics-of-spotify-songs	CSV	Danceability, energy, tempo, valence, loudness, lyrics, genre	Yes	546 // 180000
Kworb	Spotify most streamed songs of all time	https://kworb.net/spotify/songs.html	Web page	Song, total streams, daily streams	Yes	1000 // 2500
Kaggle	Most Viewed YouTube Music Videos	https://www.kaggle.com/datasets/asmonline/most-viewed-youtube-music-videos	CSV	Video, total views	Yes	357 // 2500

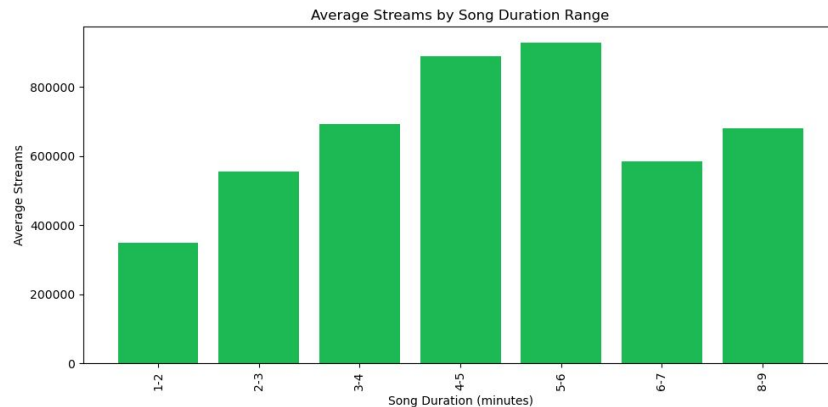
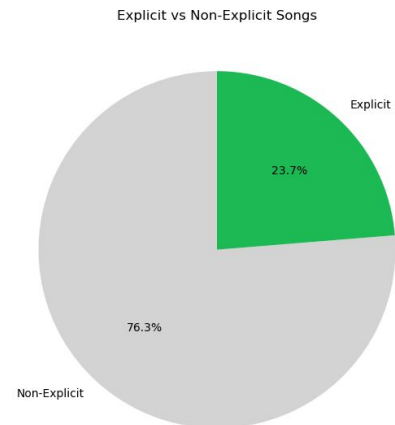
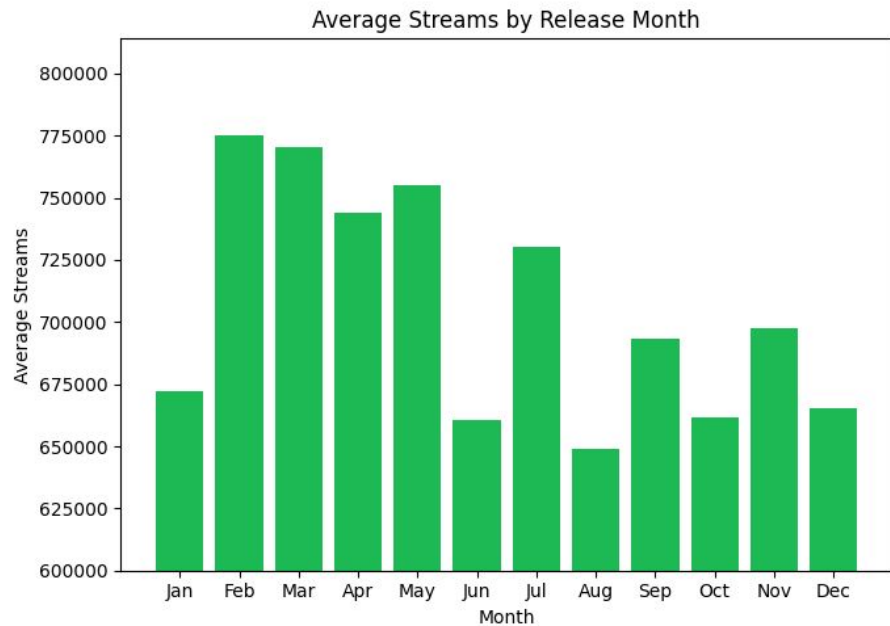
Results - Audio Features



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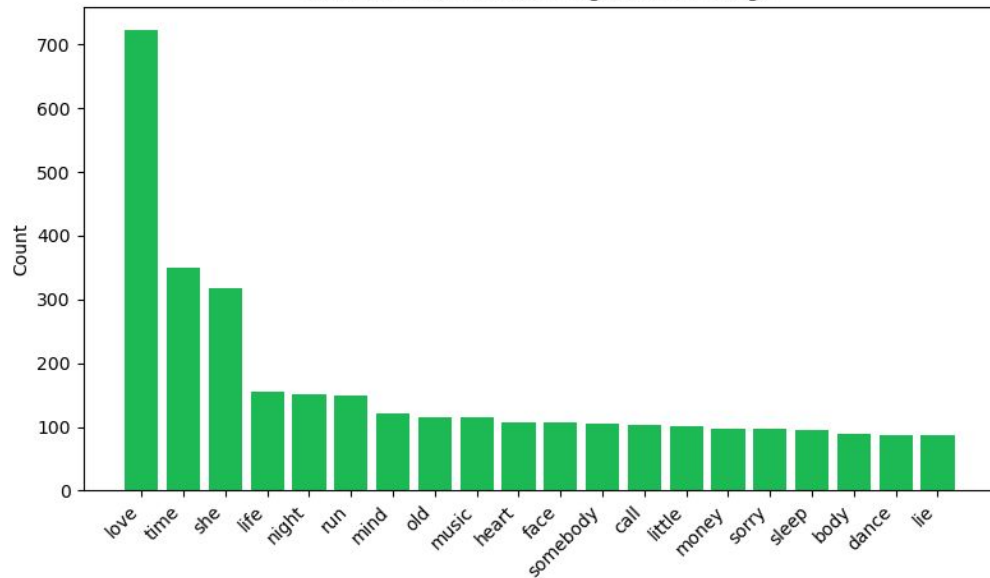


Results – Non-Audio Features

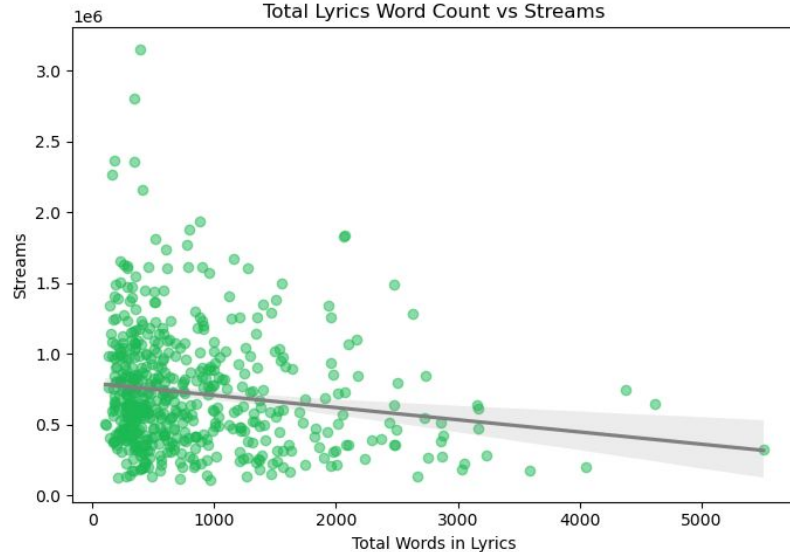


Results - Lyrics

Most Common Words in High-Stream Songs



Total Lyrics Word Count vs Streams



Challenges

- Spotify API rate limiting
- Standardizing variables & names
- In general... getting the code to work
 - A LOT of debugging & Googling
- No meaningful (new) insights found...