

INTRODUCTION TO DATA SCIENCE

FINAL PROJECT

The Trend of Music

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Content –

- 1 | Introduction
- 2 | Genre Classification
- 3 | Popularity Regression
- 4 | Trend Observation
- 5 | Reference

INTRODUCTION

Goal:

- See the **preference** of music this year.
- Understand the **trend** of the music over time.

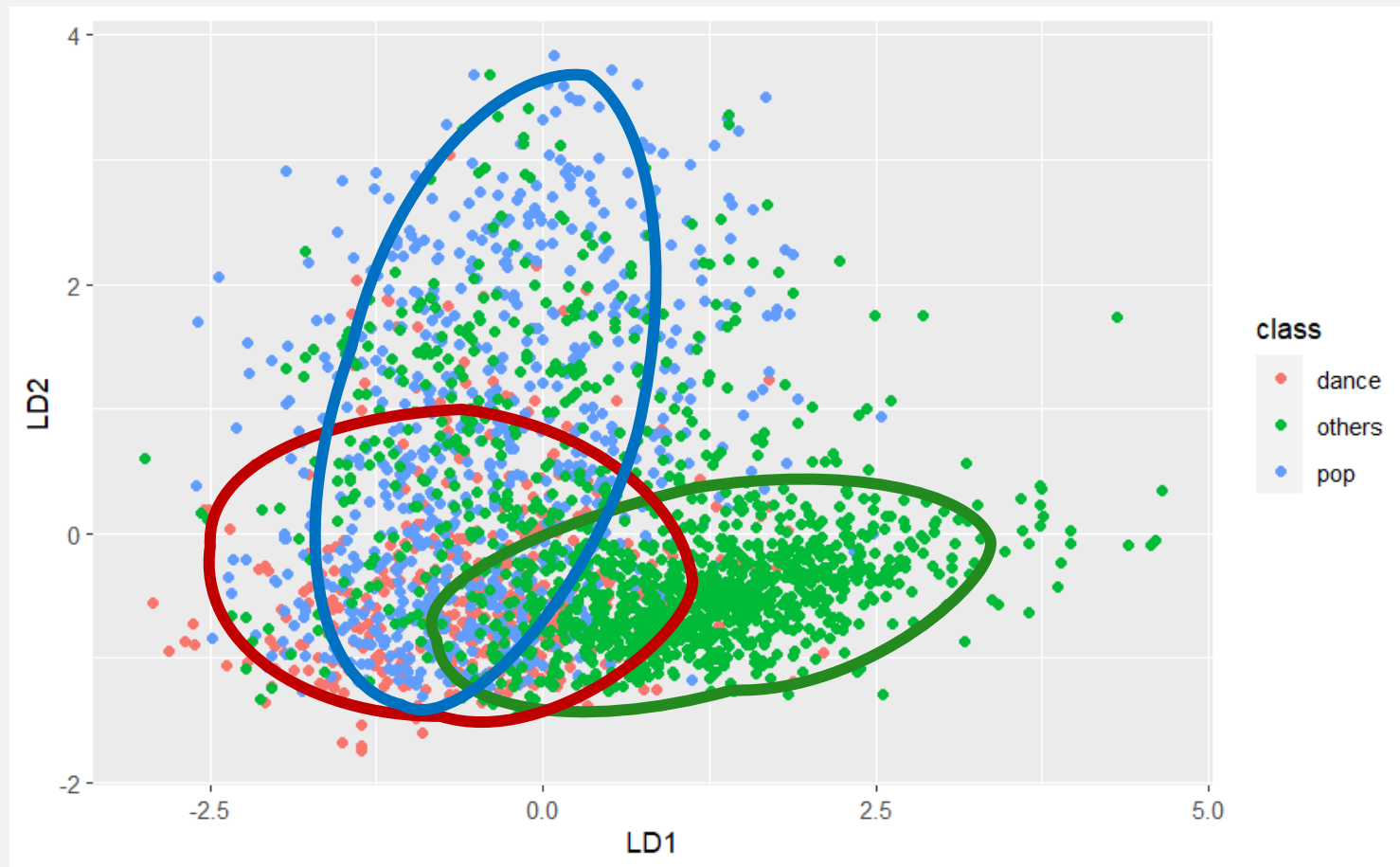
Dataset:

- Spotify (genre, stream count, song attributes, ...)

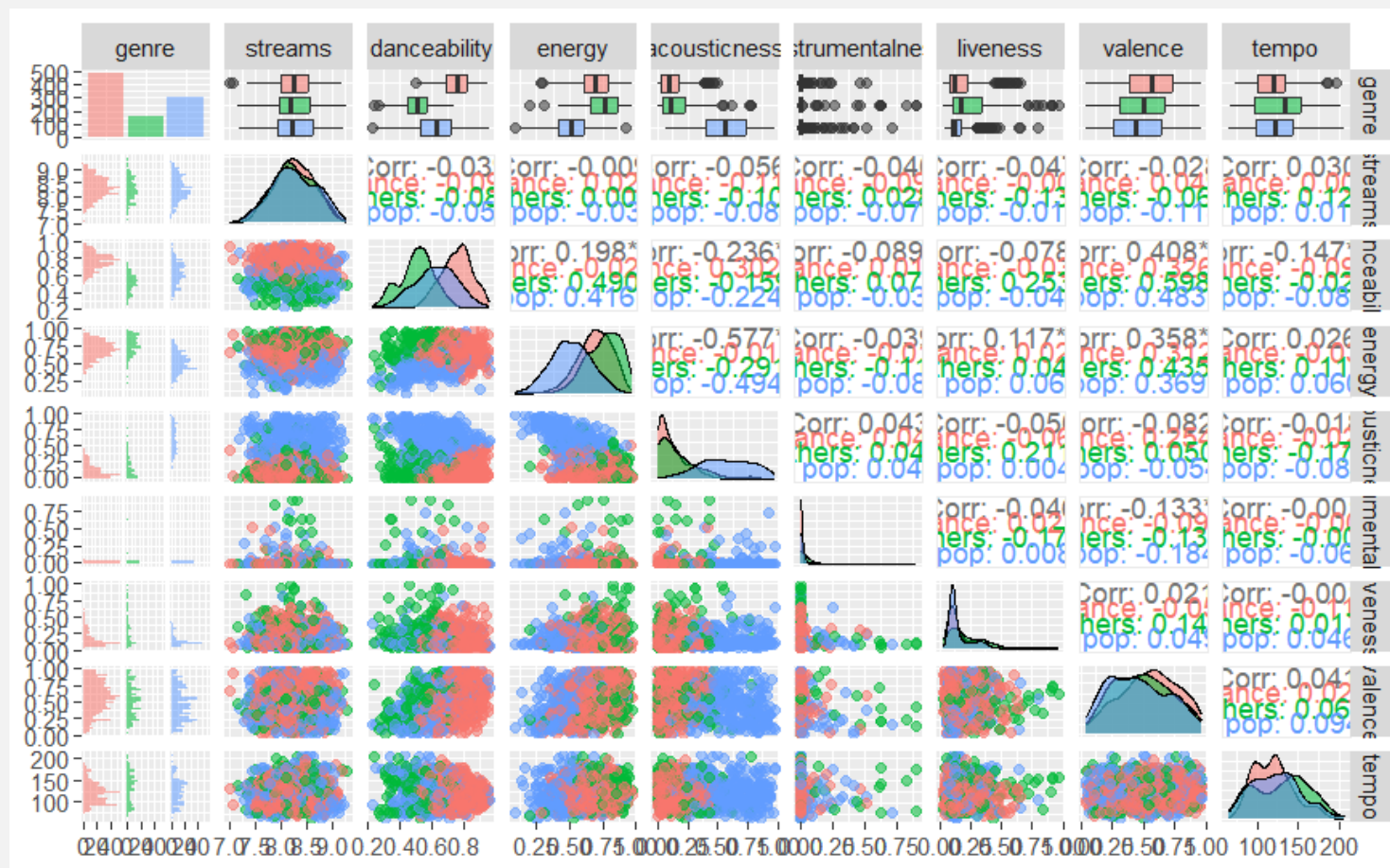
GENRE CLASSIFICATION – INTRO

- Using **linear discriminant analysis** to classify different genres (pop, dance, others)
- Useful for later analysis (regression, trend)

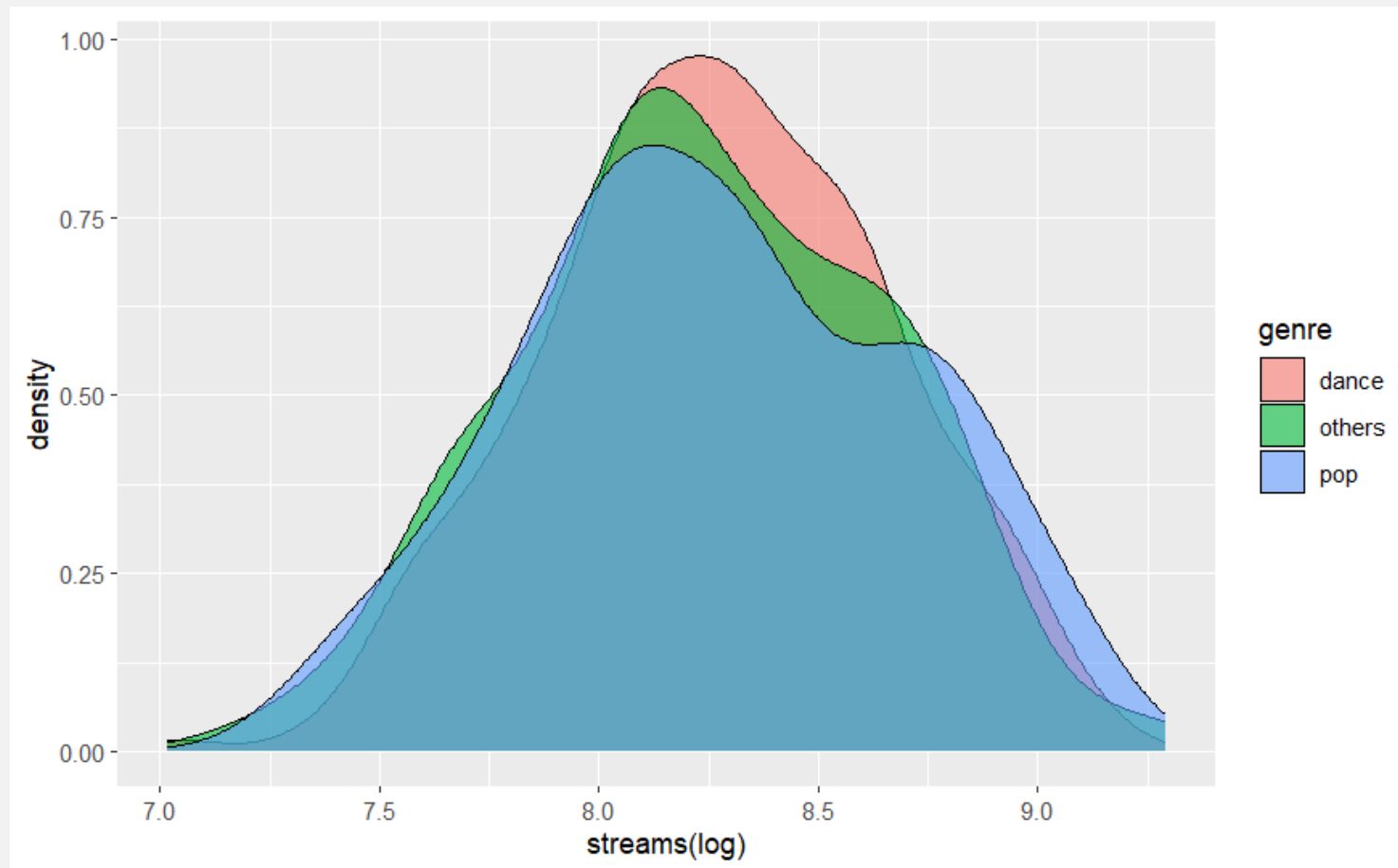
GENRE CLASSIFICATION – RESULT



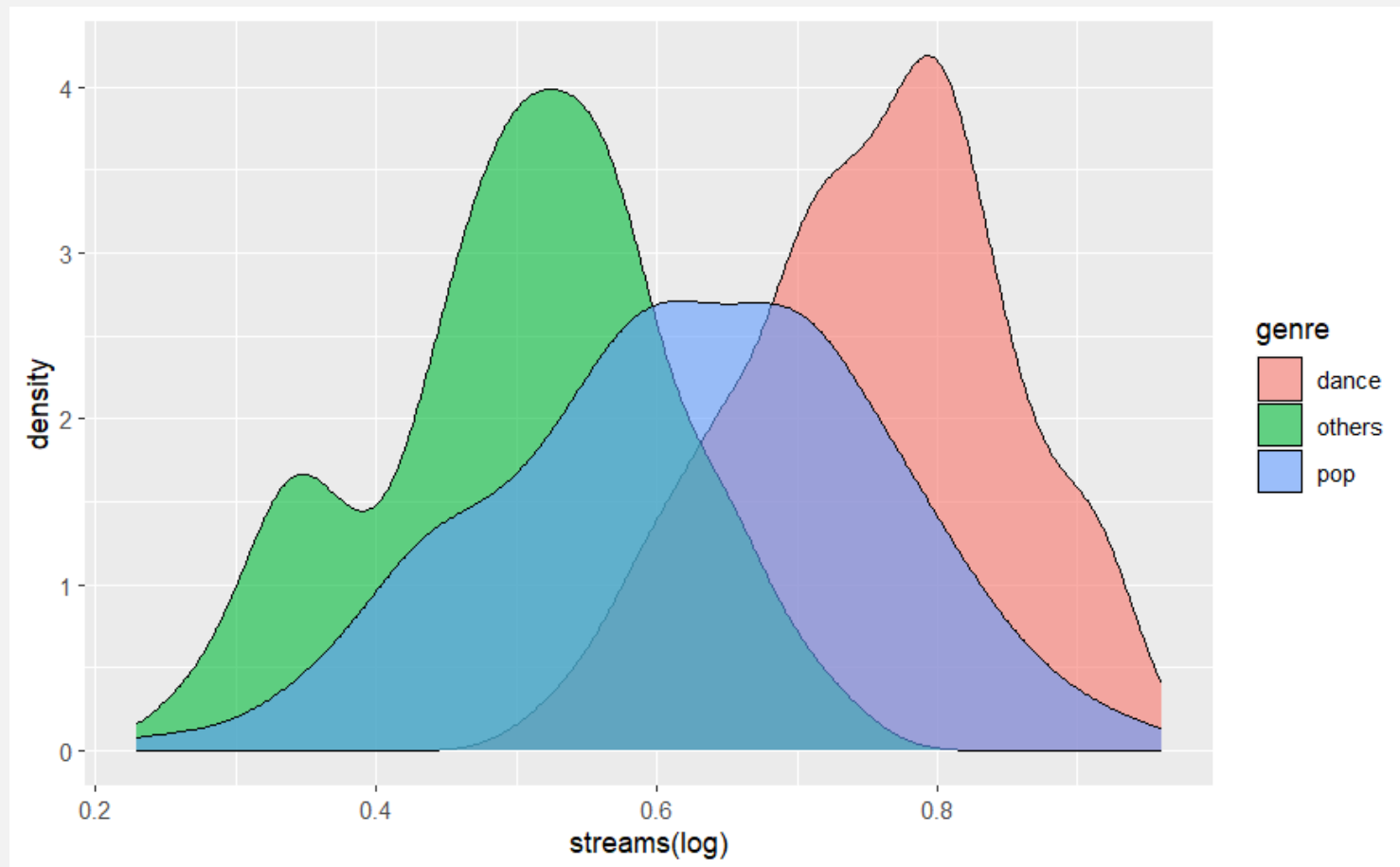
GENRE CLASSIFICATION – RESULT



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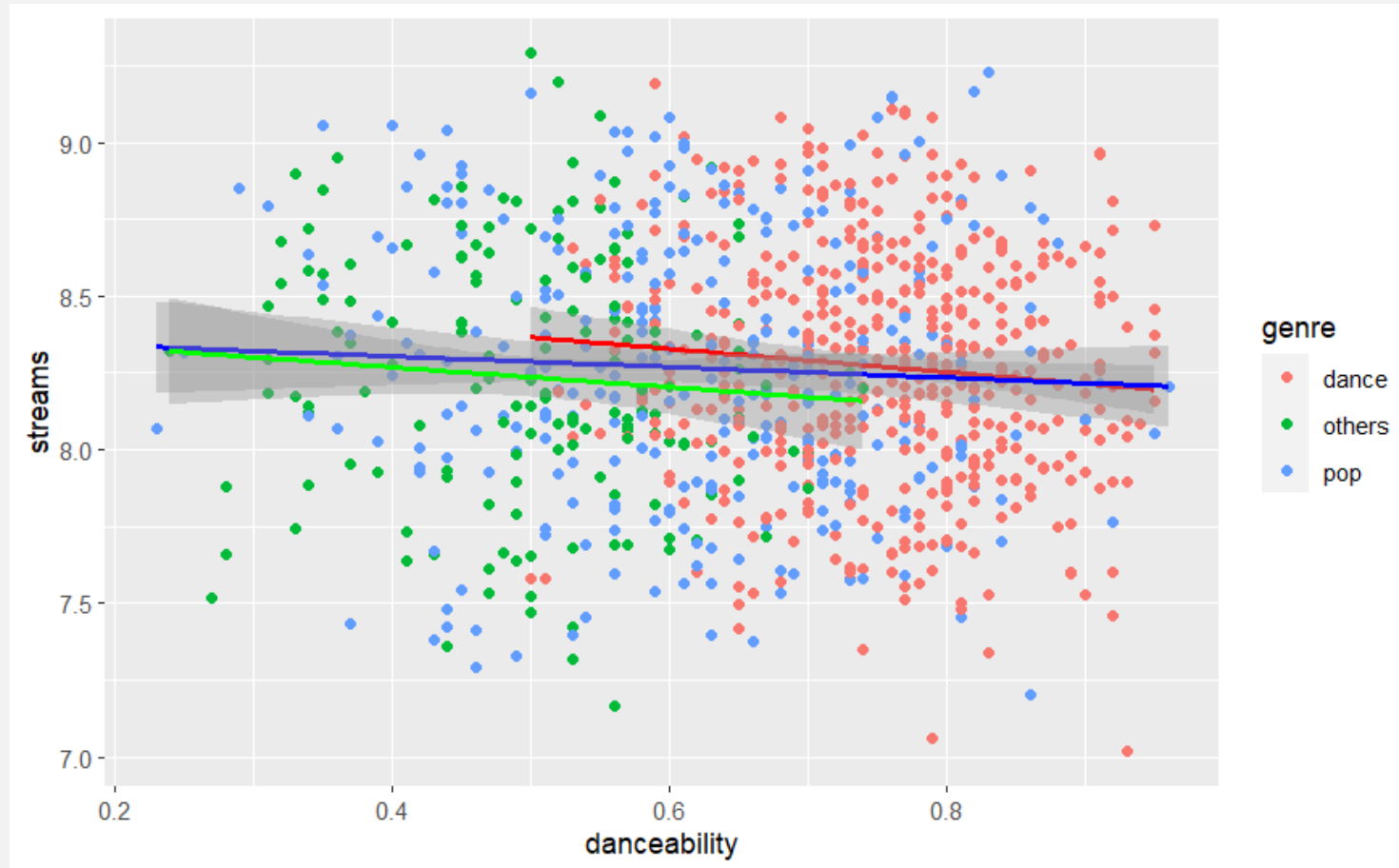
GENRE CLASSIFICATION – RESULT



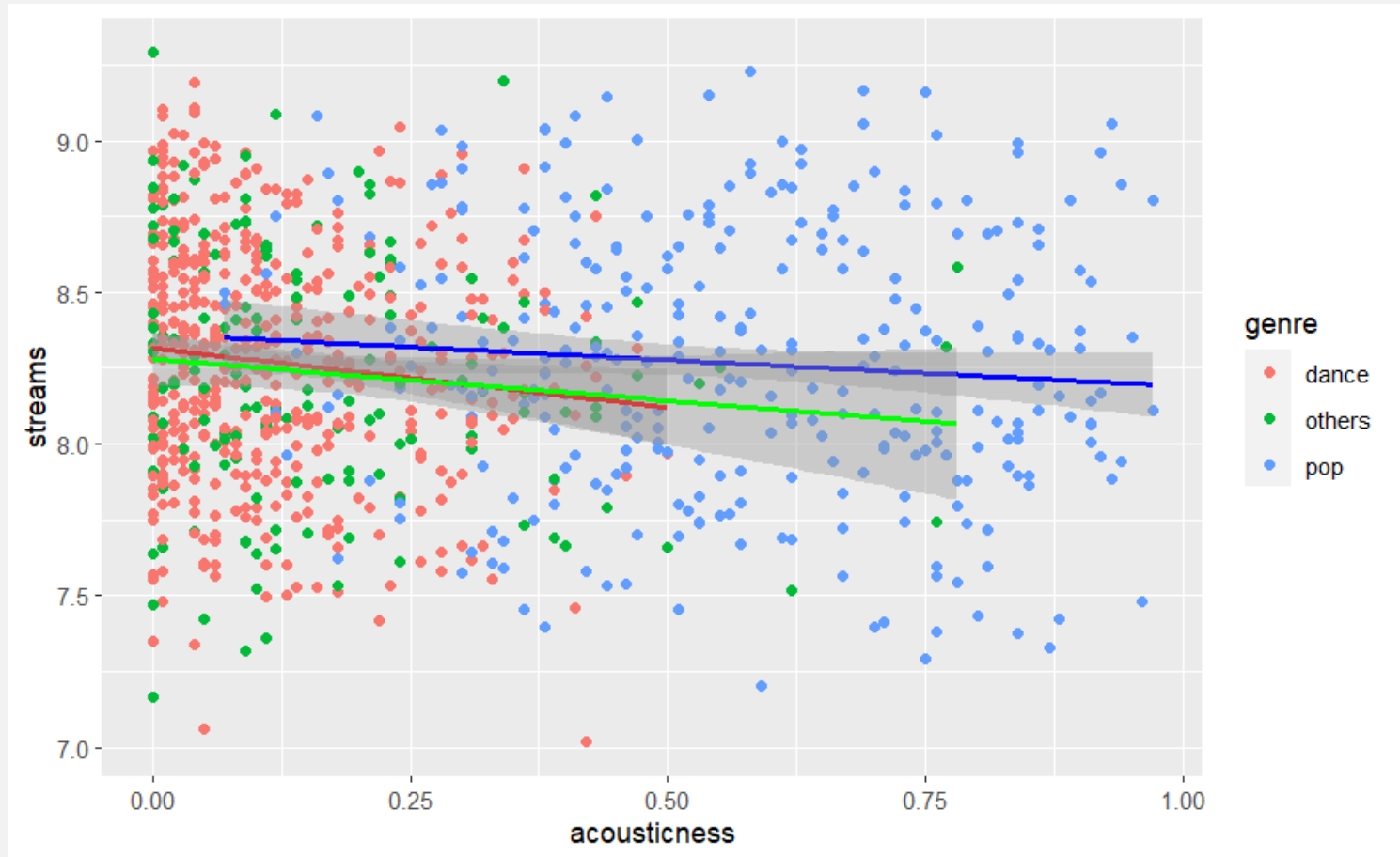
POPULARITY REGRESSION – INTRO

- See the preference of music for this year using **linear regression**
- Include the previous **classification model** to show more detail

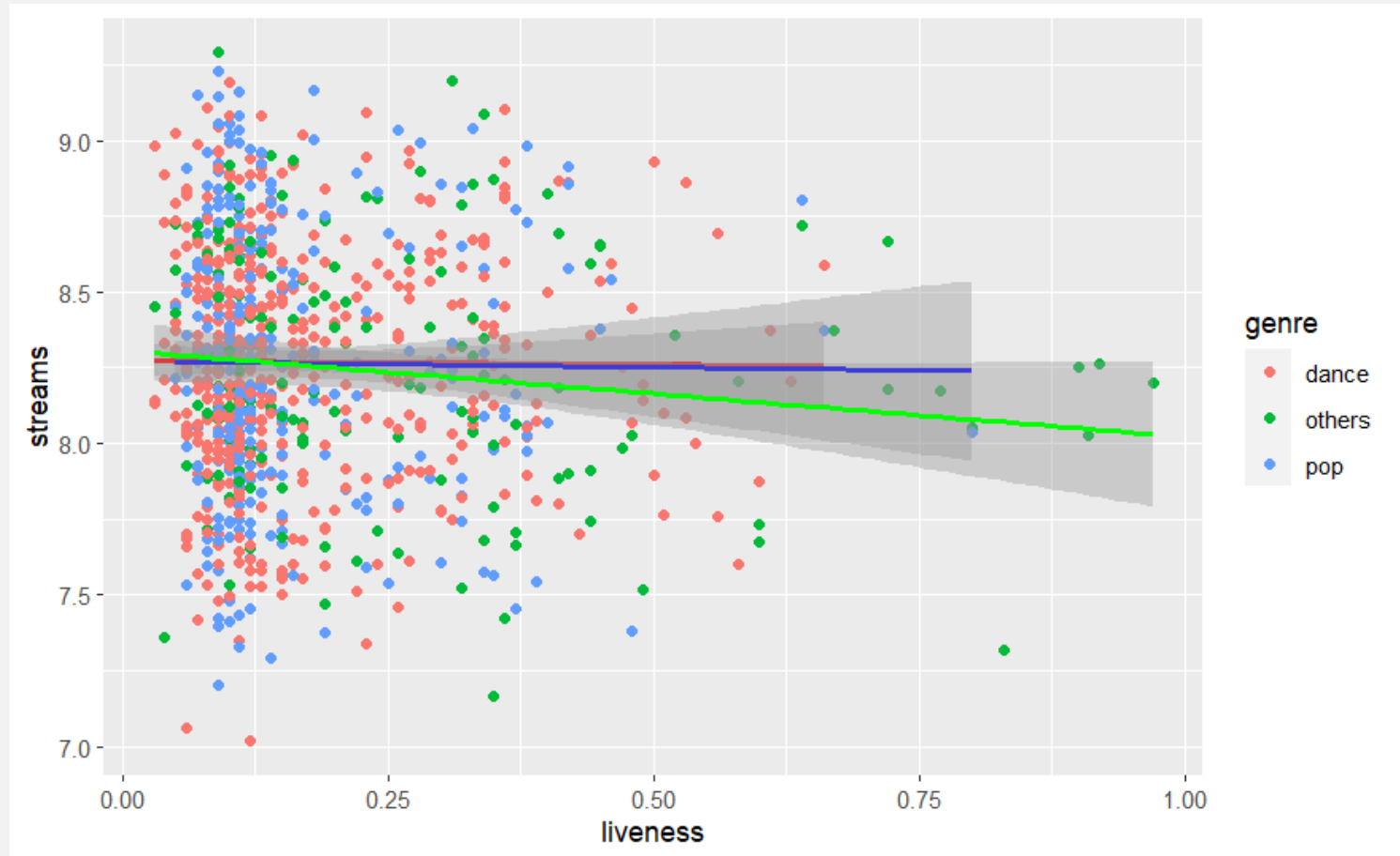
POPULARITY REGRESSION – RESULT



POPULARITY REGRESSION – RESULT



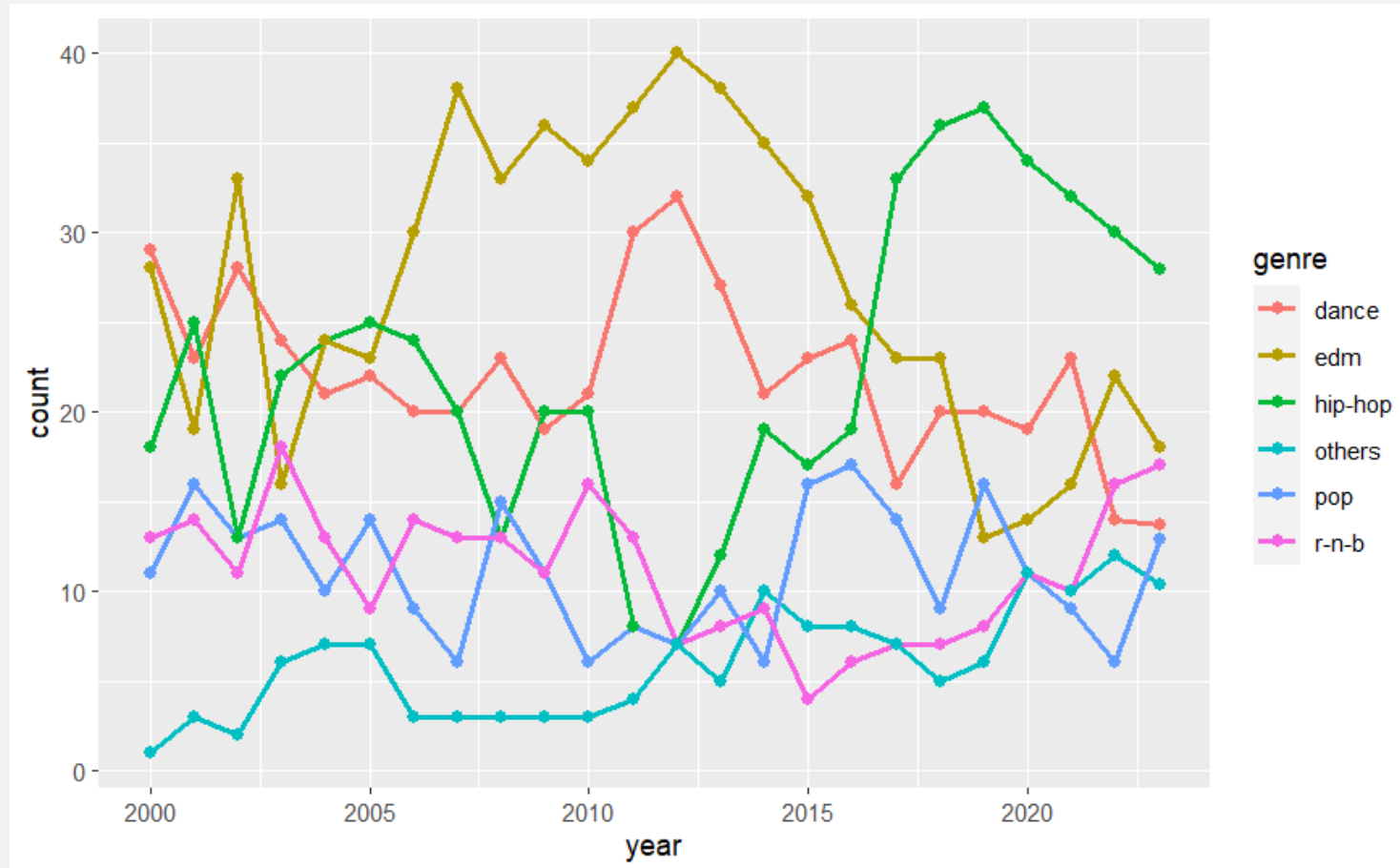
POPULARITY REGRESSION – RESULT



TREND OBSERVATION– INTRO

- Observe the trend of music from 2000 to 2023 with **classification**
- Separate the songs into **6** genres instead of 3

TREND OBSERVATION – RESULT



REFERENCE

1. Most Streamed Spotify Songs 2023

<https://www.kaggle.com/datasets/rajatsurana979/most-streamed-spotify-songs-2023>

2. Spotify Tracks Genre

<https://www.kaggle.com/datasets/thedevastator/spotify-tracks-genre-dataset>

3. Spotify Top Hit Playlist (2000-2022)

<https://www.kaggle.com/datasets/josephinelsy/spotify-top-hit-playlist-2010-2022>