

Question 3: Coldplay vs Metallica

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1. Introduction

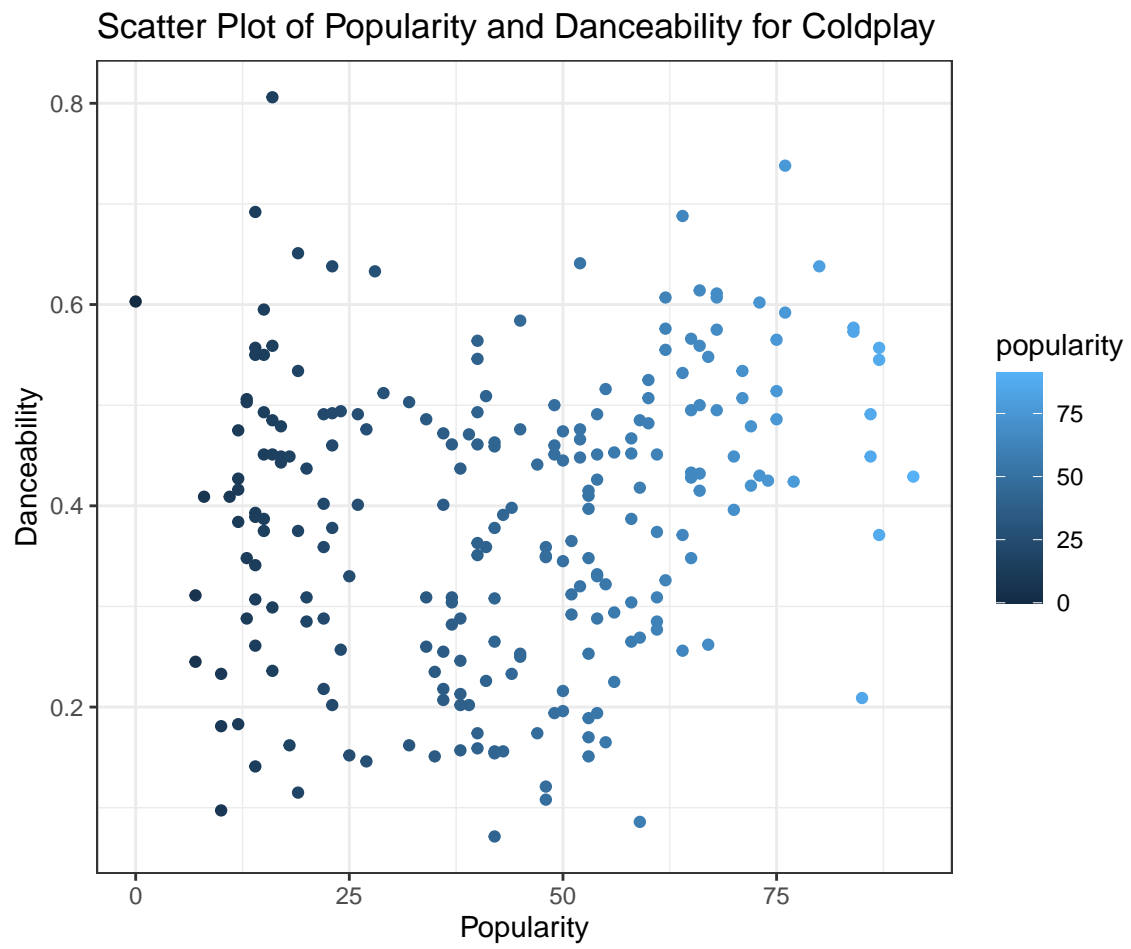
Coldplay and Metallica are two of the longest-lasting bands of this generation, with careers spanning more than two decades. The following report outlines some of the interesting factors associated with each band's popularity, making use of graphics to illustrate the results.

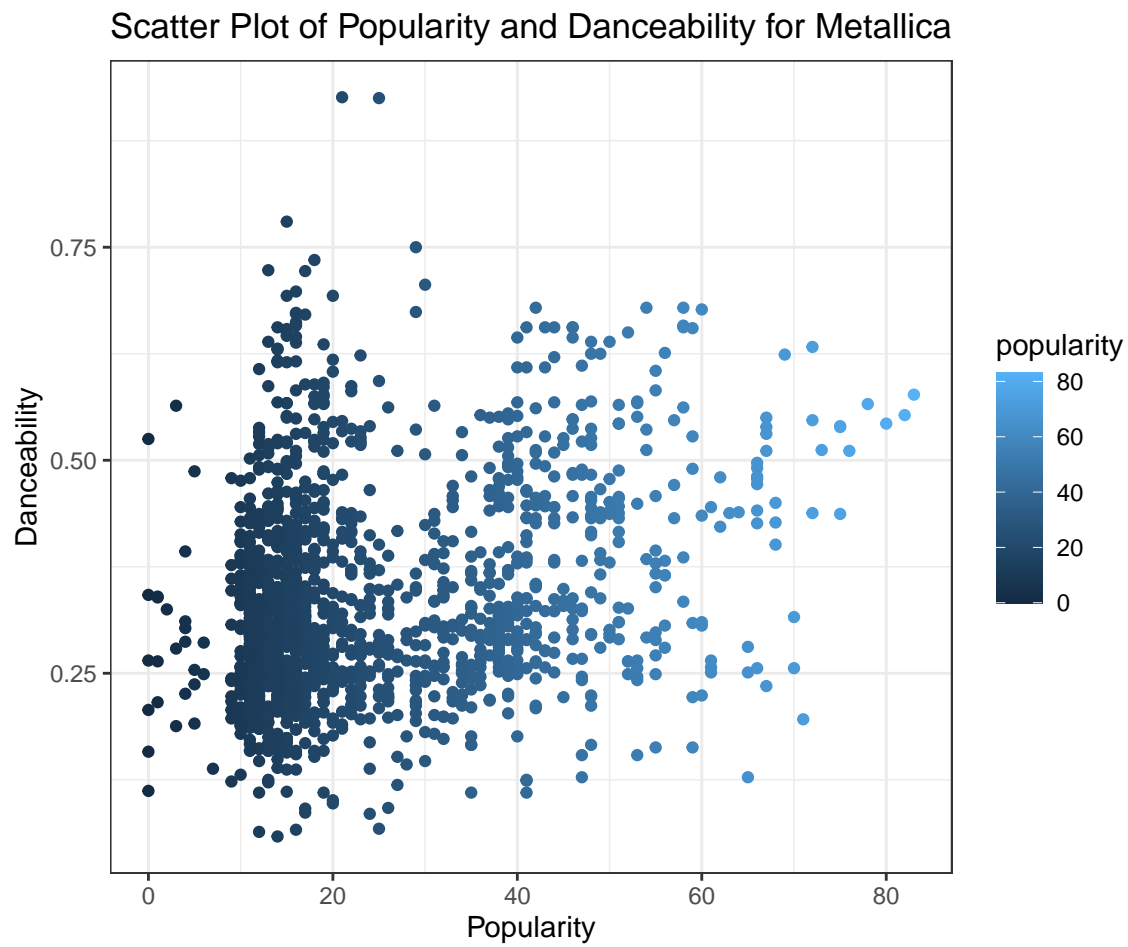
2. Danceability

Everybody loves to dance when listening to music as a form of outlet and a way to have fun. This table shows the top 10 songs based on danceability according to Spotify. Many of these artists are highly successful, indicating a possible link between danceability and popularity.

name	artist	danceability
Leave Me Now	Herbert	0.986
Go Girl	Pitbull	0.985
Funky Cold Medina	Tone-Lōc	0.984
State of Shock	The Jacksons	0.982
Teachers	Daft Punk	0.98
Give It To Me	Timbaland	0.975
Ice Ice Baby (Radio Edit)	Vanilla Ice	0.975
Tape Song	The Kills	0.974
Heavy Machinery	Scuba	0.973
Long Shot Kick De Bucket	The Pioneers	0.971

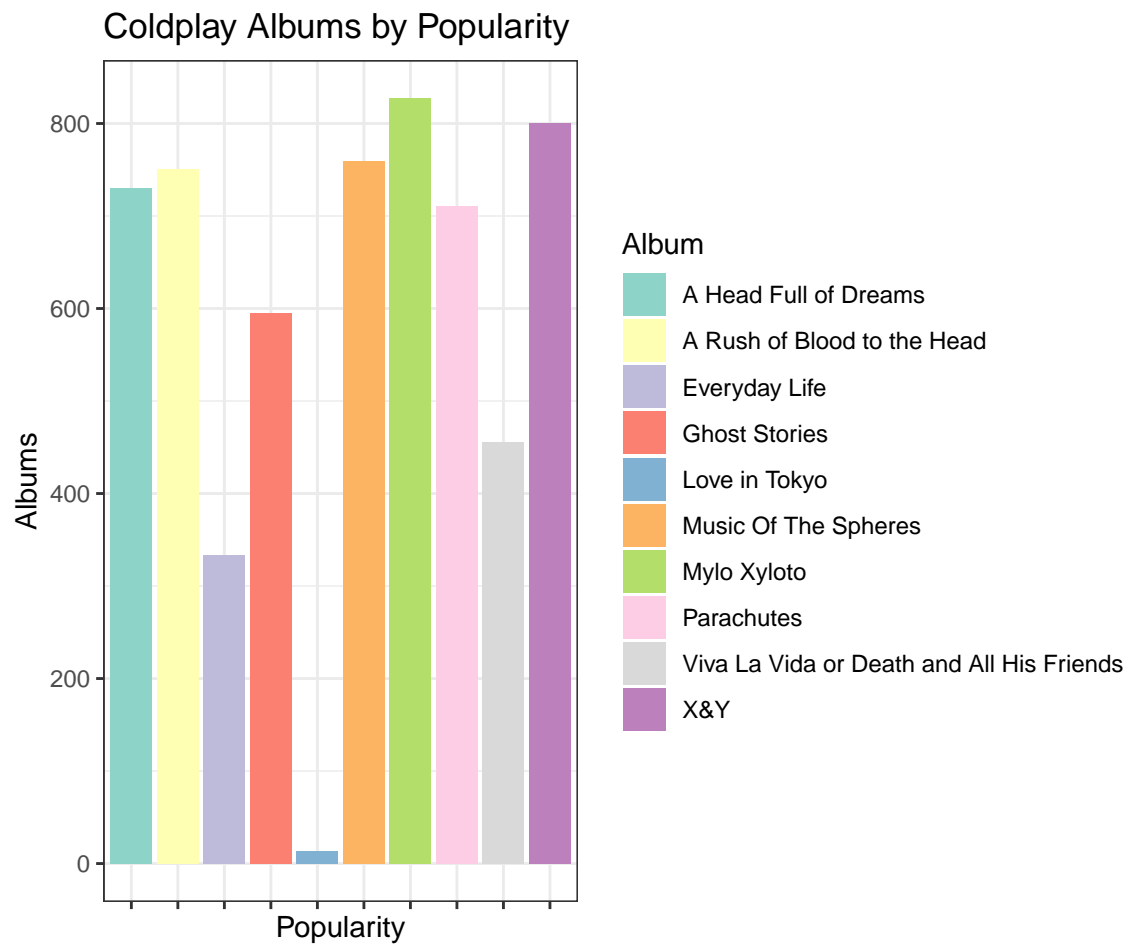
These scatter plots show the correlation between danceability and popularity for each of the bands, indicating a positive link between the two factors.

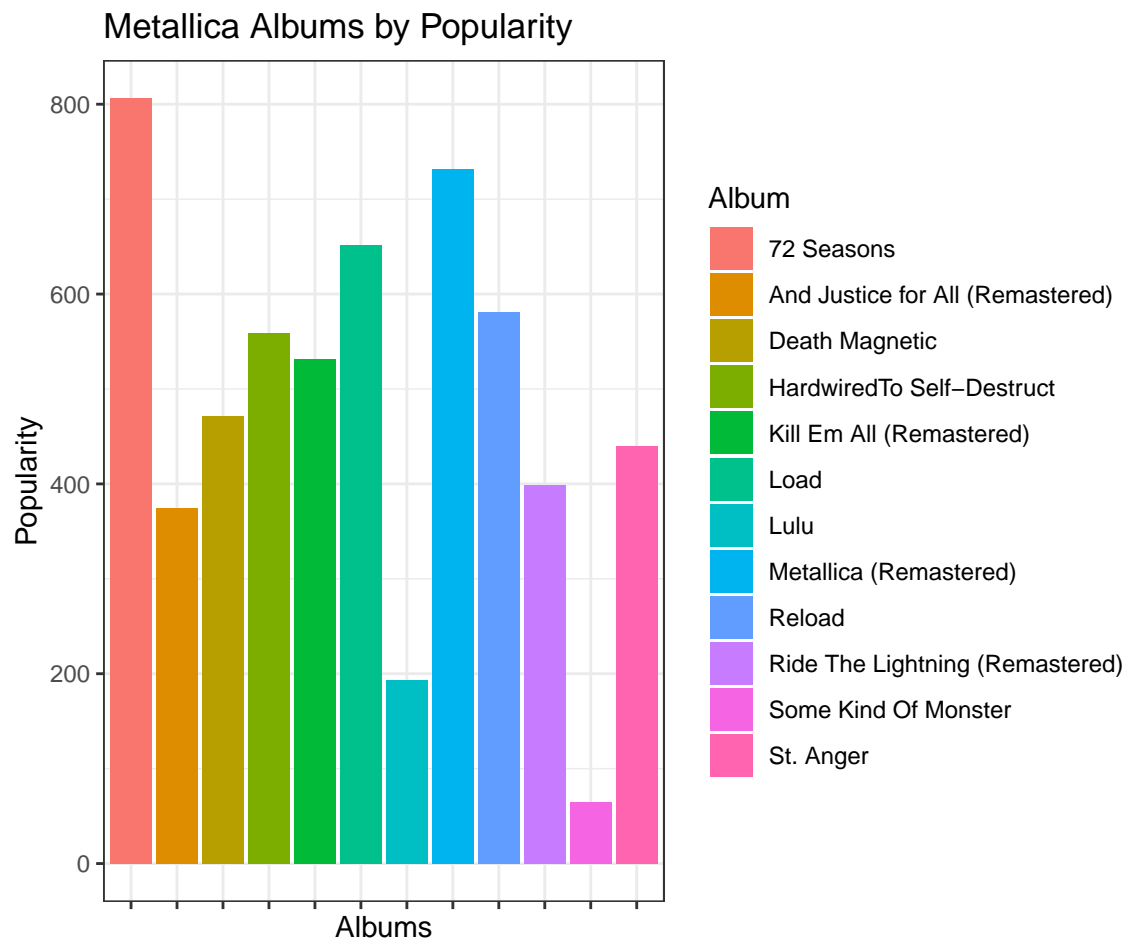




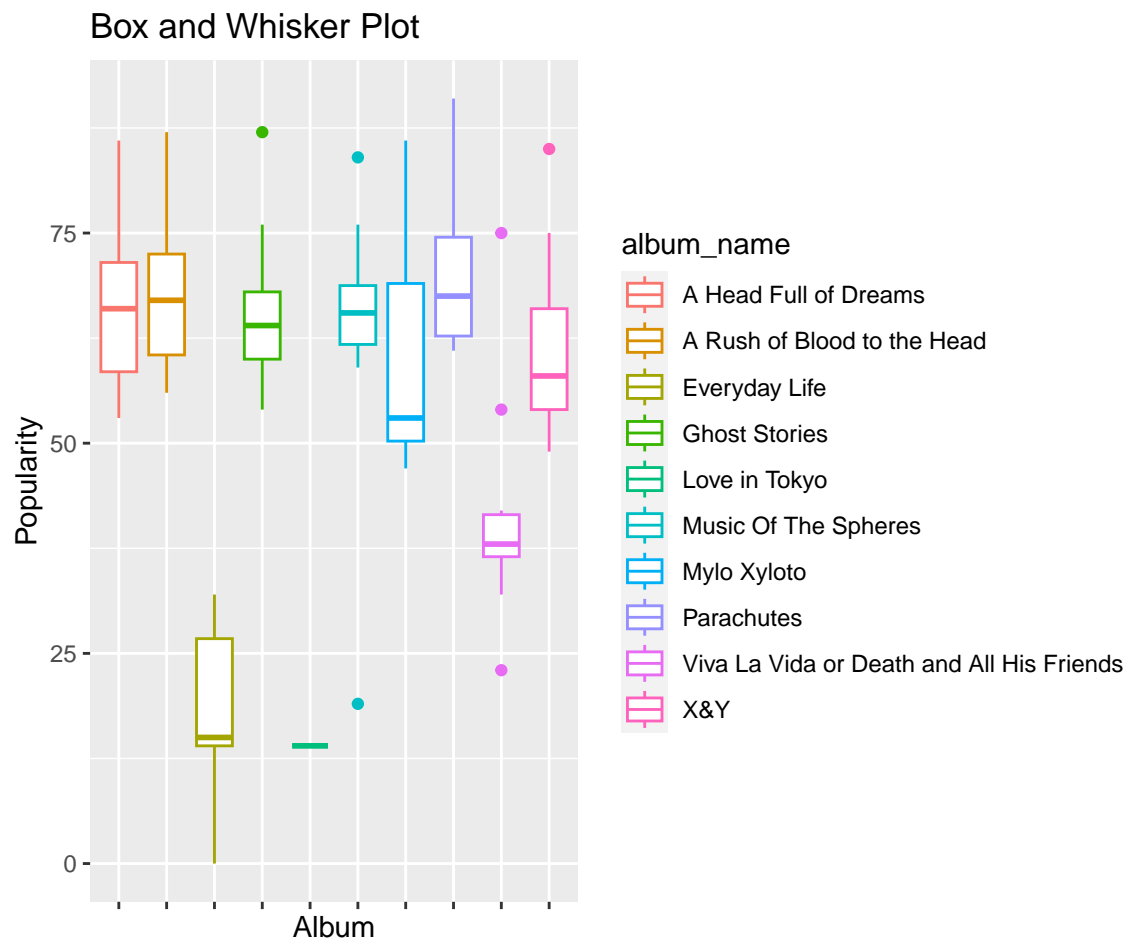
3. Popularity

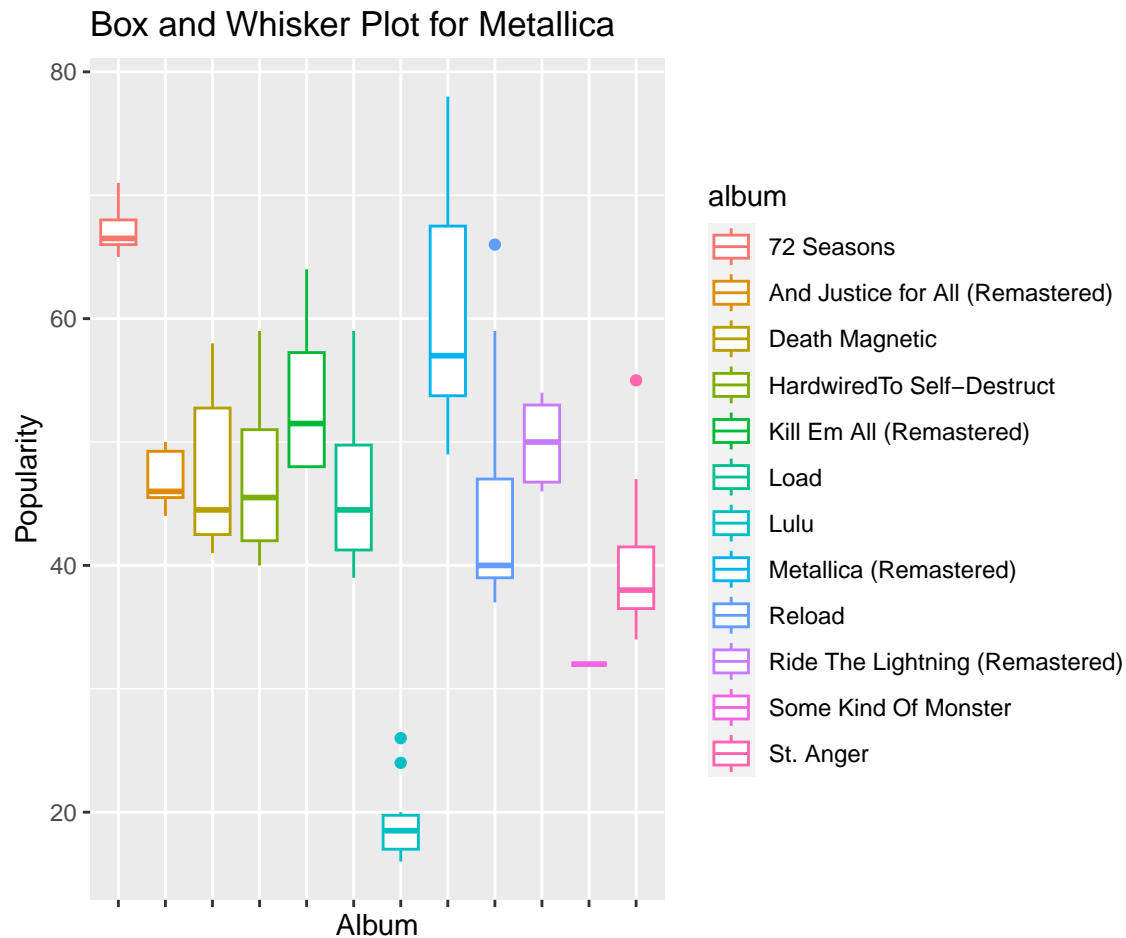
The popularity of each of the bands' albums is also important to consider and is highlighted in the following graphs.





These graphs show that the most popular albums for Coldplay and Metallica are Mylo Xyloto and 72 Seasons, respectively. The next set of graphs also compares the popularity of each album but shows the distribution across popularity by using box and whisker plots.





For some of the albums the distributions are quite large, indicating greater diversity in the range of popularity perceptions for each album. Considering the bands' most popular albums from the first bar graphs, Mylo Xyloto and 72 Seasons, we see that Mylo Xyloto has a much more spread out box and whisker plot compared to 72 Seasons. The latter album can, therefore, be reliably considered as the most popular album for Metallica. However, it may be better to consider A Head Full of Dreams or Music of the Spheres as Coldplay's most popular albums as they have smaller distributions while still having overall high popularity.