

Lyrics story-- what do different kinds of songs want to express to us?

Music, a kind of international story, is playing a more and more important role in our daily life. Through listening to the music, people relax themselves and find resonance. Through creating music, musicians pronounce their own voice, convey their feelings and spirits.

There are different kind of music. R&B, Jazz, folk and so on. Different kinds of music have different kind of style, and, of course, they express different kinds of moods. Now I want to analyze: does same kind of music express the totally same mood, does different kinds of music express the same mood, is some kind of music express the particular kind of mood? Now we begin to analyze.

Data preparation

For analysis, we should first grab data and clean them. The data we use here contains 125704 songs which public from 1970s to 2010s. Our basic mind is to analyze the mood of one data through some key words which could convey particular type of moods. Actually it is 8 types of mood.

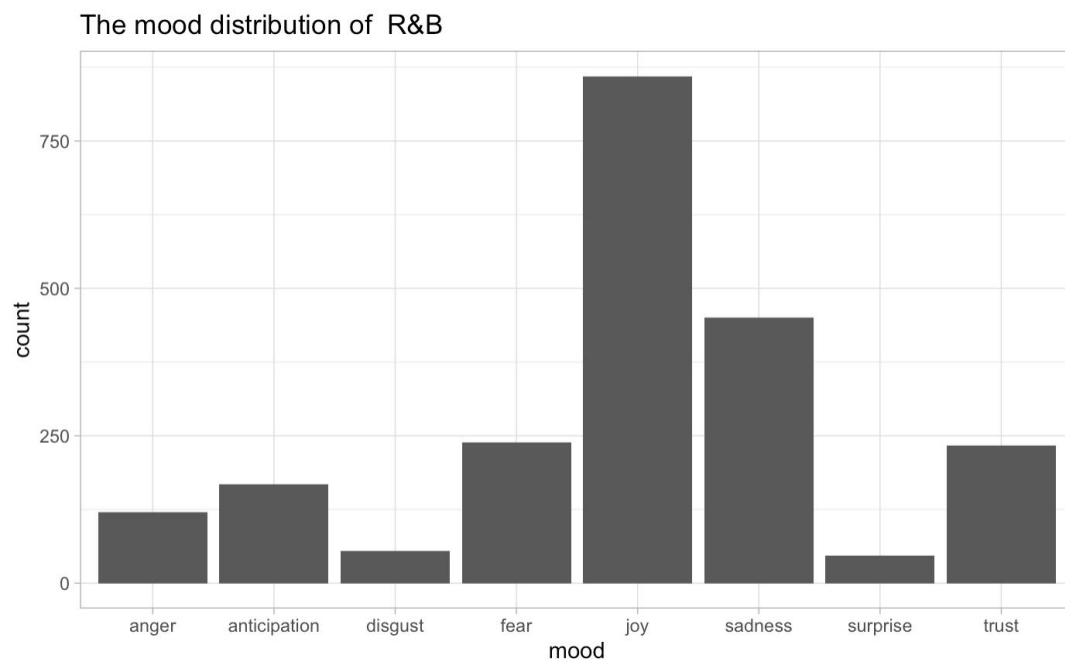
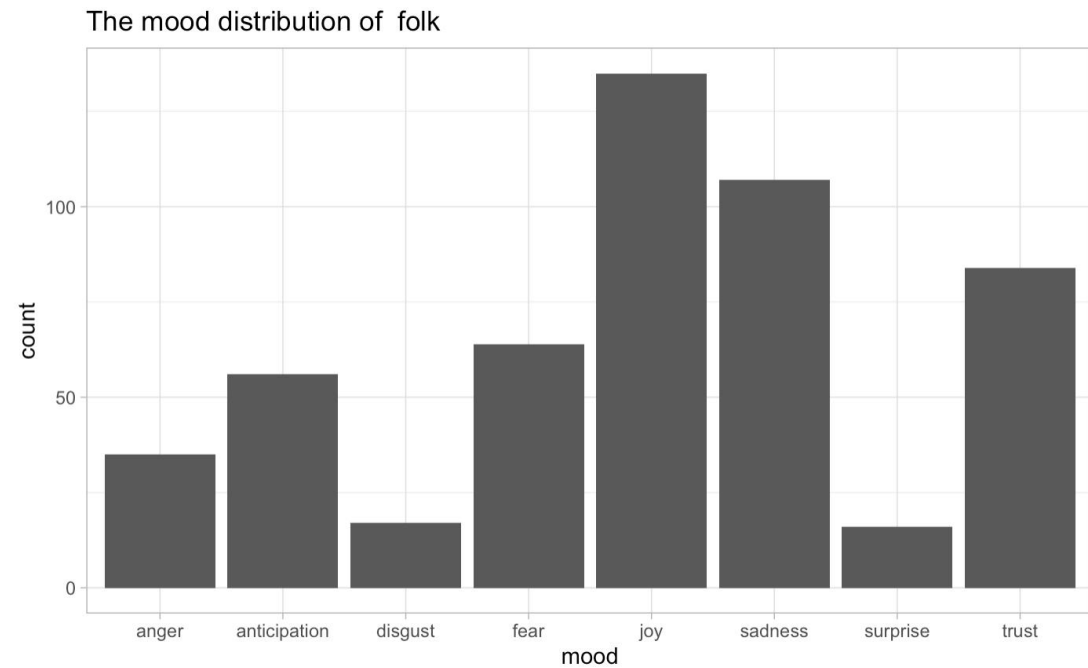
Firstly we have clean some useless words in the lyrics, which could make our analysis more accurate.

Secondly, we use NRC lexicon to calculate the “mood proportion” and mood matrix.

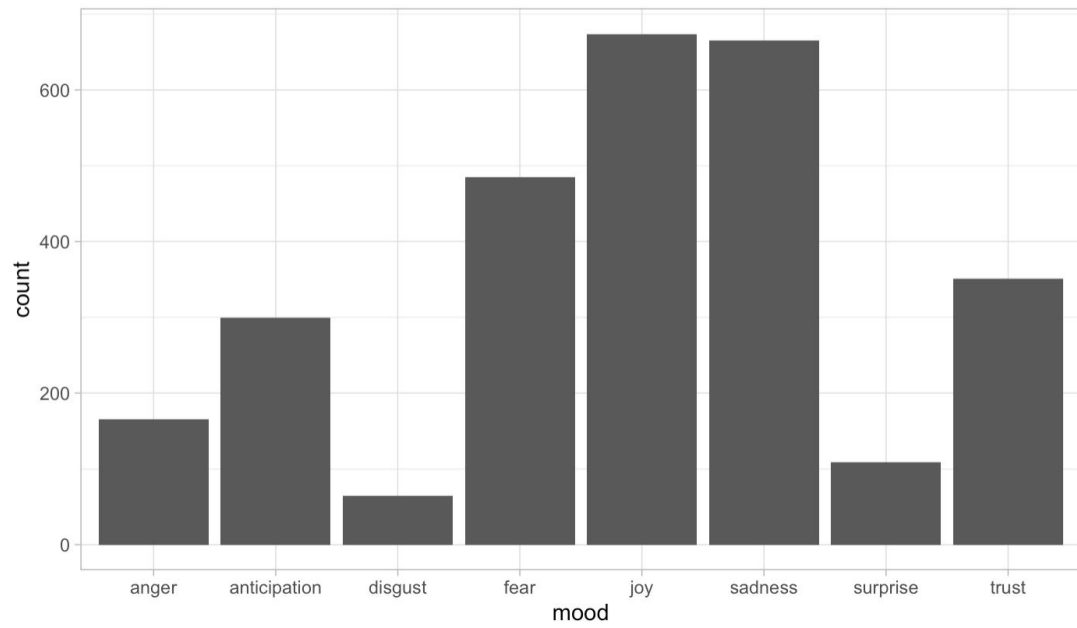
Thirdly, through the matrix we get above, we could define the “mood” of each songs. After definition, we could divided our song into different types. Finally, we divide each kind of songs into 8 groups through the mood they convey, then analyze their proportion.

Joy-- lifelong aim of human

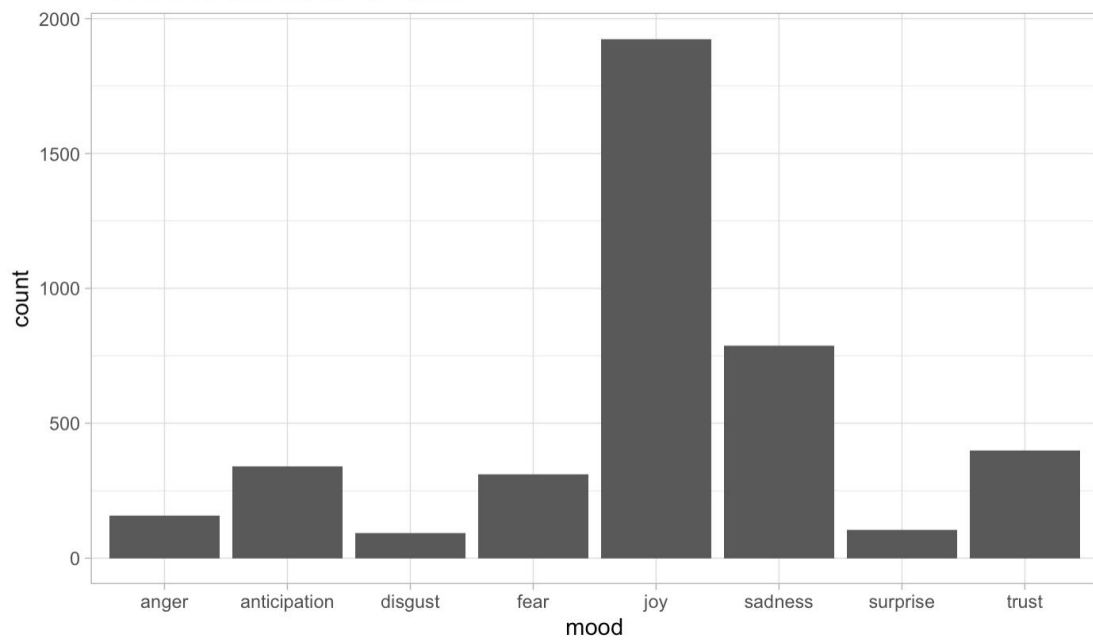
After drawing the graphics, we find that most kinds of songs express the mood of “joy”. Here is the result we get.



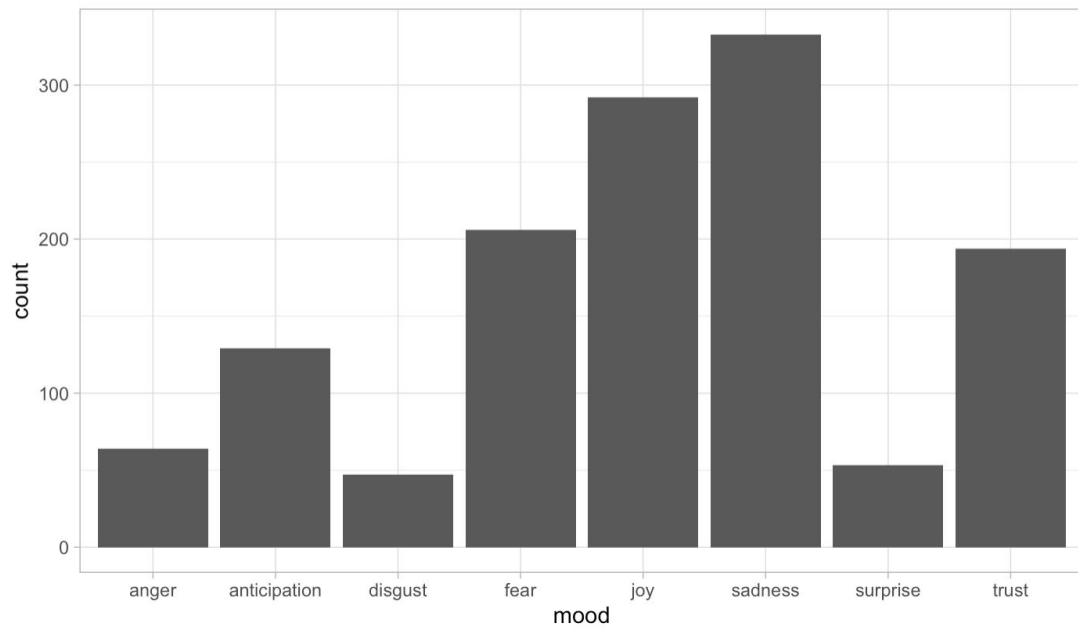
The mood distribution of Electronic



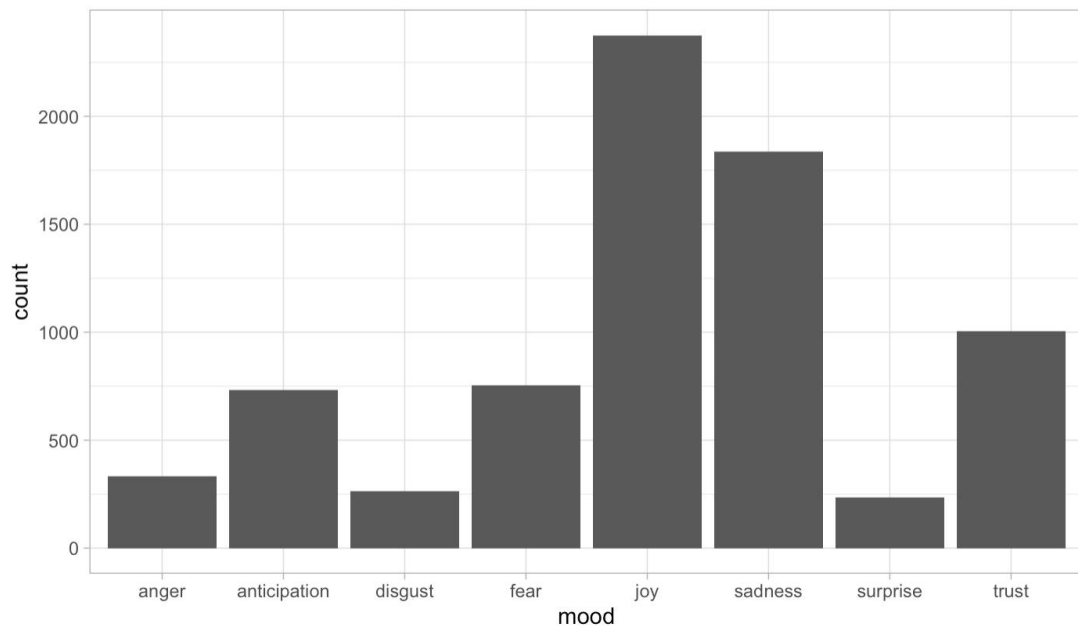
The mood distribution of Jazz

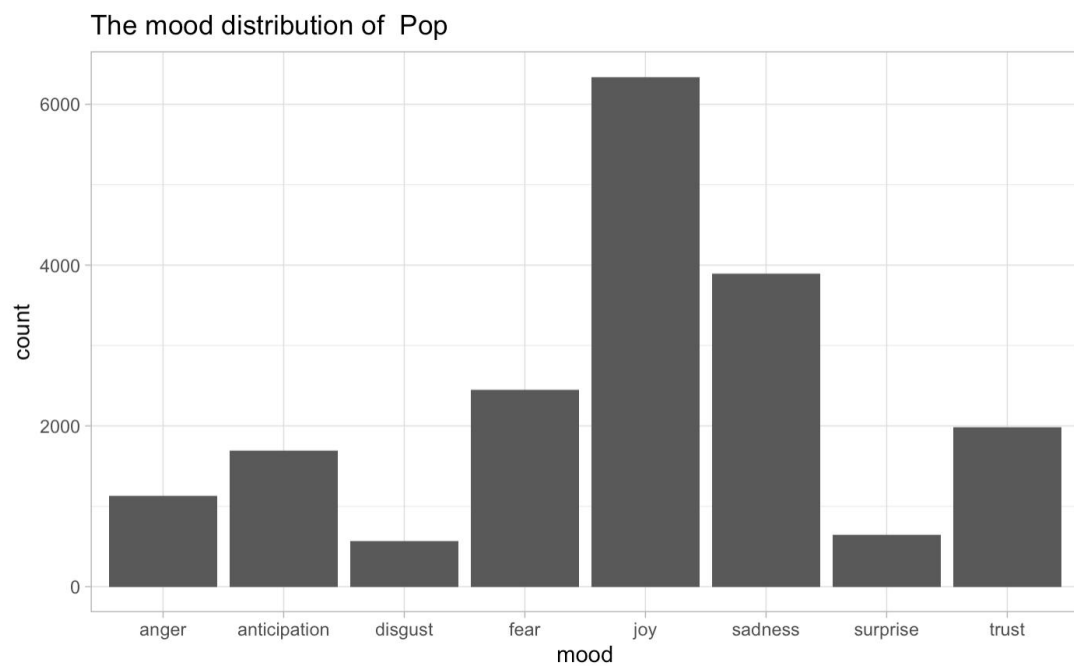
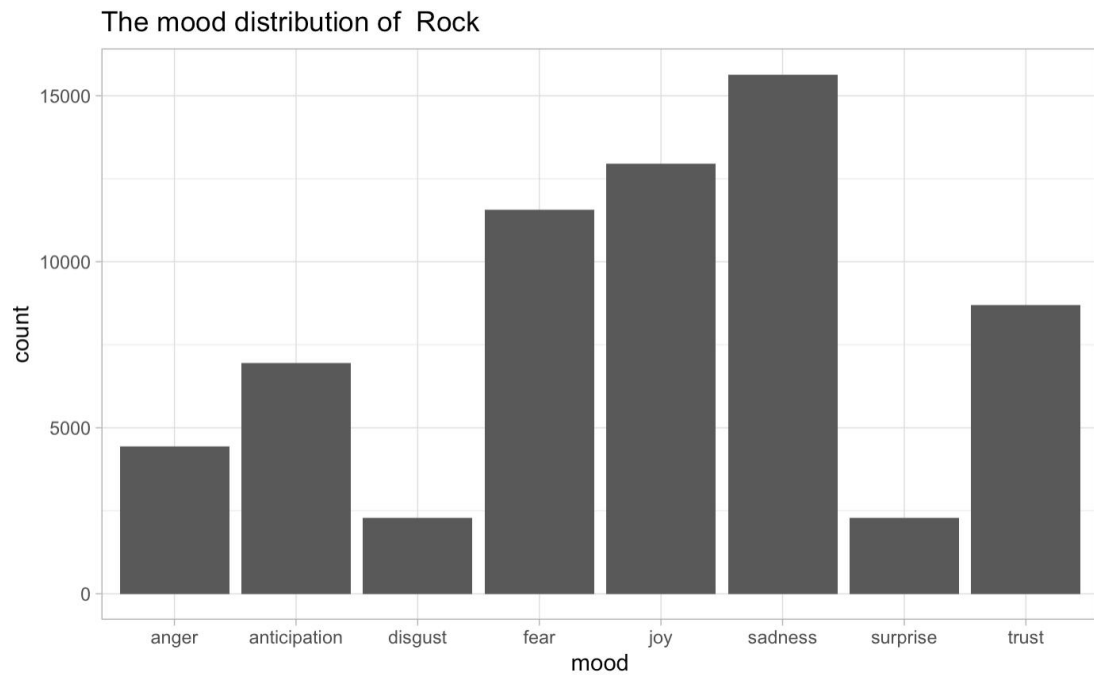


The mood distribution of Indie



The mood distribution of Country



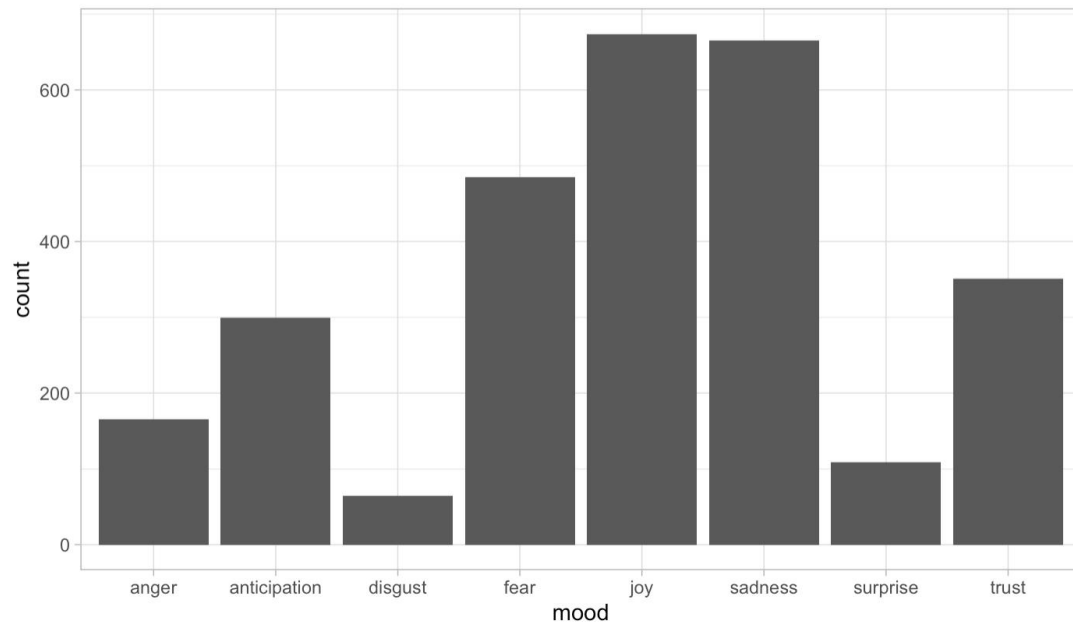


From the picture above, we could find that most kind of music contain joy mood in high proportion, especially for the Jazz music and pop music.

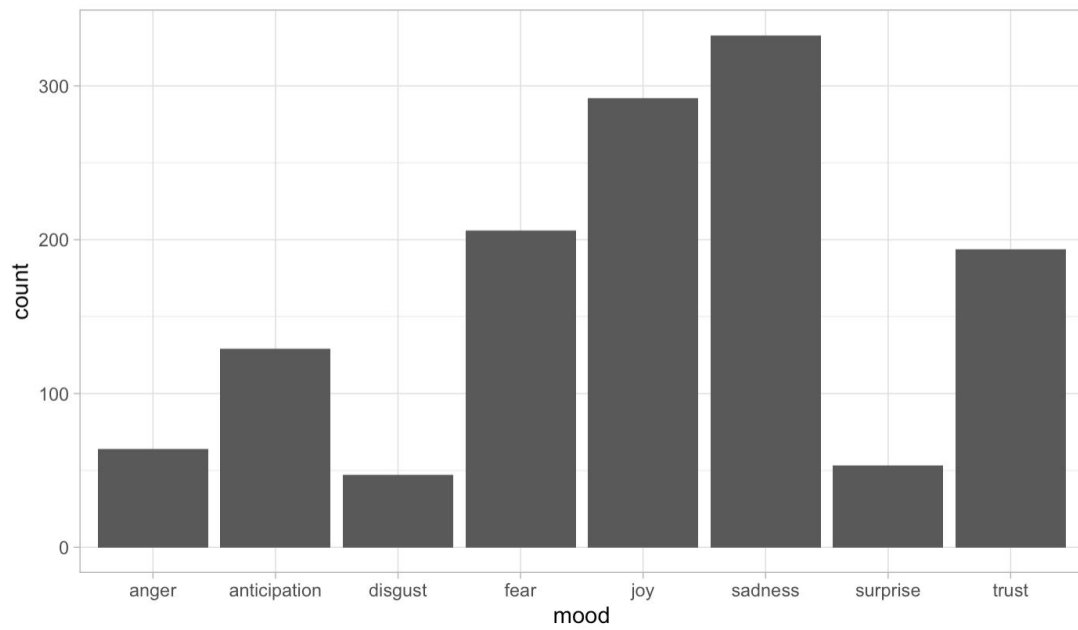
The music types that contains multiple moods


Except for joy, people always use music to express other mood.

The mood distribution of Electronic



The mood distribution of Indie





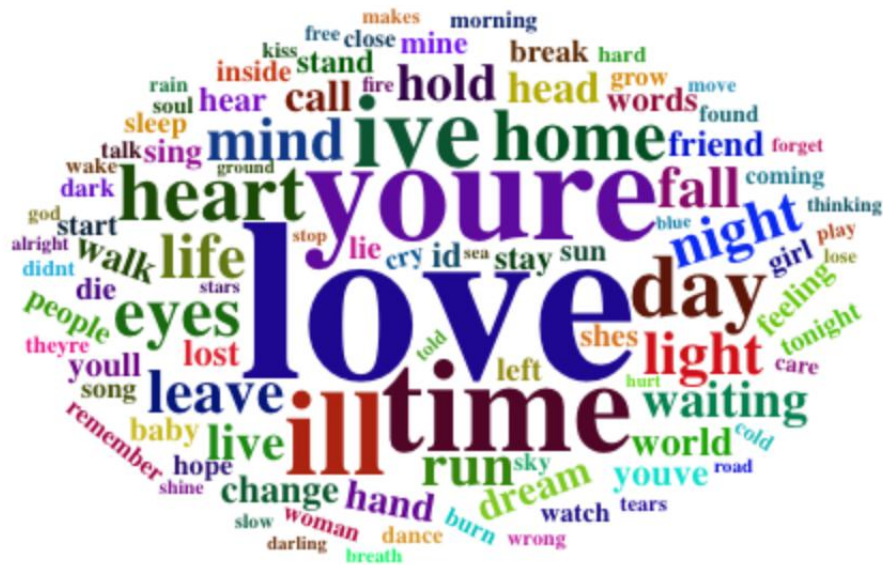
A bar chart with 'mood' on the x-axis and 'count' on the y-axis. The x-axis categories are anger, anticipation, disgust, fear, joy, sadness, surprise, and trust. The y-axis has major ticks at 0, 5000, 10000, and 15000. The bars are dark gray. The counts for each mood are approximately: anger (4500), anticipation (7000), disgust (2500), fear (11500), joy (13000), sadness (15500), surprise (2500), and trust (8800).

mood	count
anger	4500
anticipation	7000
disgust	2500
fear	11500
joy	13000
sadness	15500
surprise	2500
trust	8800

For the Electronic music, the result show like this.



The indie music show like this.



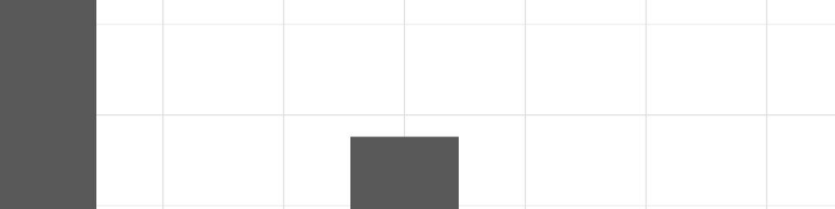
And the rock music show like this:



We could find that both three kinds of music show multiple moods, and the most come-up words show a kind of fear, joy and sadness.

Hip-Hop-- a angry type of music

During the analysis of Hip--Hop music, we get the result like this:



A bar chart with 'mood' on the x-axis and 'count' on the y-axis. The x-axis categories are anger, anticipation, disgust, fear, joy, sadness, surprise, and trust. The y-axis has major ticks at 0, 1000, and 2000. The bars represent the following approximate counts: anger (2800), anticipation (600), disgust (400), fear (1900), joy (1300), sadness (900), surprise (100), and trust (900).

mood	count
anger	2800
anticipation	600
disgust	400
fear	1900
joy	1300
sadness	900
surprise	100
trust	900

From the result above, we could conclude that most words in Hip-Hop music convey anger.

Conclusion

From the result we get above, we could conclude that except for the “angry Hip-Hop music”, most kinds of music convey the joy mood. Also, Rock music, Indie music and electronic music are both diversified music.