

Billboard Hot 100 charts 1965 - 2021 Billboard

Introduction

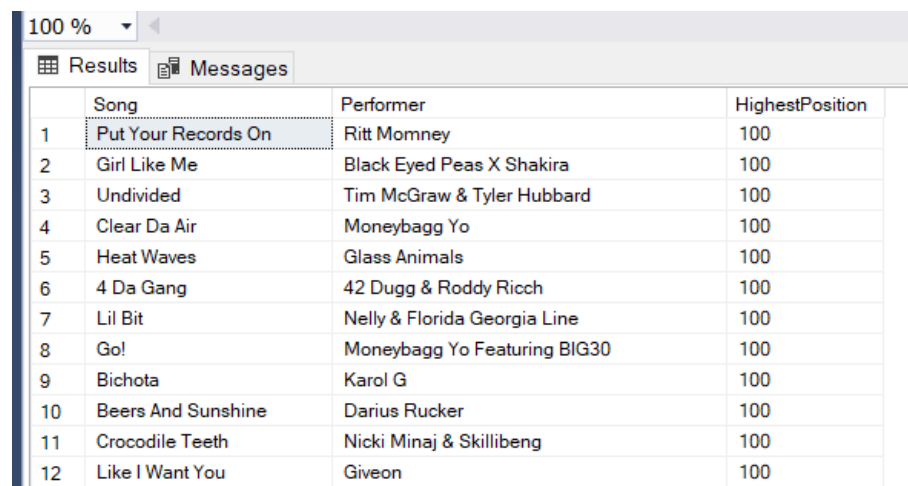
In this project, we analysed the Billboard Hot 100 data using Microsoft SQL Server to gain insights into the most popular artists and songs of all time. The purpose of this analysis was to provide Spotify with valuable insights that could help them improve their recommendation algorithms and user experience.

Data Collection

We obtained the Billboard Hot 100 data from data.world which contained information about the week position, song, performer, previous week position, peak position, and weeks on the chart for each entry.

Data Analysis

We used Microsoft SQL Server to analyse the data and extract valuable insights. Specifically, we used SQL queries to identify the topmost popular artists and the most popular songs of all time and of 2021.

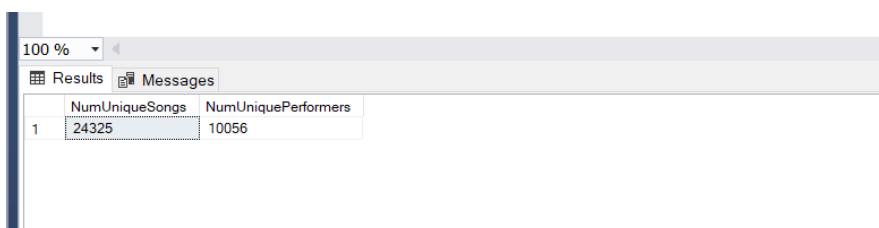


100 %

Results Messages

	Song	Performer	HighestPosition
1	Put Your Records On	Ritt Momney	100
2	Girl Like Me	Black Eyed Peas X Shakira	100
3	Undivided	Tim McGraw & Tyler Hubbard	100
4	Clear Da Air	Moneybagg Yo	100
5	Heat Waves	Glass Animals	100
6	4 Da Gang	42 Dugg & Roddy Ricch	100
7	Lil Bit	Nelly & Florida Georgia Line	100
8	Go!	Moneybagg Yo Featuring BIG30	100
9	Bichota	Karol G	100
10	Beers And Sunshine	Darius Rucker	100
11	Crocodile Teeth	Nicki Minaj & Skillibeng	100
12	Like I Want You	Giveon	100

We also found the number of unique songs and unique performers in the dataset, the top.



100 %

Results Messages

	NumUniqueSongs	NumUniquePerformers
1	24325	10056

songs with the highest peak position and longest weeks on chart,

100 %				
Results Messages				
	Song	Performer	WeekID	PeakPosition
1	There Goes My Everything	Jack Greene	1967-01-07	100
2	Tapout	Rich Gang Featuring Lil Wayne, Birdman, Future, ...	2013-05-25	100
3	Don't Let Go	Commander Cody	1975-02-22	100
4	The Mouse	Soupy Sales	1965-04-24	100
5	Takin' All I Can Get	Mitch Ryder And The Detroit Wheels	1966-07-30	100
6	True Love Goes On And On	Burl Ives	1964-02-15	100
7	That's Enough	Rosco Robinson	1966-08-06	100
8	Big Daddy	Jill Corey	1958-08-30	100
9	There It Is (Part 1)	James Brown	1972-05-06	100
10	Taxi	Harry Chapin	1972-03-11	100
	Song	Performer	WeekID	WeeksOnChart
10	Sail	AWOLNATION	2014-03-22	79
11	Radioactive	Imagine Dragons	2014-03-08	78
12	Sail	AWOLNATION	2014-03-15	78
13	Radioactive	Imagine Dragons	2014-03-01	77
14	Sail	AWOLNATION	2014-03-08	77
15	I'm Yours	Jason Mraz	2009-10-10	76
16	Blinding L...	The Weeknd	2021-05-29	76
17	Radioactive	Imagine Dragons	2014-02-22	76
18	Sail	AWOLNATION	2014-03-01	76
19	I'm Yours	Jason Mraz	2009-10-03	75
20	Blinding L...	The Weeknd	2021-05-22	75

and the number of weeks each song has been on the chart.

100 %			
Results Messages			
	Song	Performer	NumWeeksOnChart
1	Radioactive	Imagine Dragons	87
2	Sail	AWOLNATION	79
3	Blinding Lights	The Weeknd	76
4	I'm Yours	Jason Mraz	76
5	How Do I Live	LeAnn Rimes	69
6	Party Rock Anthem	LMFAO Featuring Lauren Bennett & GoonRock	68
7	Counting Stars	OneRepublic	68
8	Foolish Games/You Were Meant For Me	Jewel	65
9	Rolling In The Deep	Adele	65
10	Before He Cheats	Carrie Underwood	64
11	I Hope	Gabby Barrett Featuring Charlie Puth	62
12	You And Me	Lifeline	62
13	Ho Hey	The Lumineers	62
14	Demons	Imagine Dragons	61
15	Circles	Post Malone	61
16	Macarena (Bayside Boys Mix)	Los Del Rio	60
17	Need You Now	Lady Antebellum	60

Finally, we found the number of songs that have dropped from a certain position to a lower position on the chart.

100 %	
Results Messages	
	NumDroppedSongs
1	151899

Results and Benefits

The results of our analysis can be of great benefit to Spotify's business. By incorporating these insights into their recommendation algorithms, they can improve the accuracy of their personalized recommendations and enhance the overall user experience. For example:

- By knowing the most popular artists of all time, Spotify can create custom playlists featuring their songs, which can help retain users and increase engagement.
- By knowing the most popular songs of all time and of 2021, Spotify can create playlists and recommendations based on these songs, which can help attract new users and increase user engagement.
- By knowing the number of unique songs and unique performers in the dataset, Spotify can better understand the diversity of music and artists that are popular among listeners.
- By knowing the top songs with the highest peak position, Spotify can create playlists and recommendations based on these songs, which can help attract new users and increase user engagement.
- By knowing the number of weeks each song has been on the chart, Spotify can create playlists and recommendations based on the longevity of songs, which can help attract users who prefer listening to classic hits.
- By knowing the number of songs that have dropped from a certain position to a lower position on the chart, Spotify can gain insights into the popularity and decline of songs and adjust their recommendation algorithms accordingly.

Overall, the insights gained from our analysis can help Spotify stay ahead of the competition and improve their position in the music streaming industry.