

-- Questions and Result Sets:

-- Q1. Who are the 5 most popular artists?

-- We can define the most popular artist as the artist with the most quantity of tracks bought.

	artist_name character varying (120) 🔒	total_tracks_bought bigint 🔒
1	Queen	192
2	Jimi Hendrix	187
3	Nirvana	130
4	Red Hot Chili Peppers	130
5	Pearl Jam	129

-- Q2. What are the 10 most popular songs and their genres?

-- We can define the most popular songs as the tracks that were bought the most.

	track_name character varying (150) 🔒	total_tracks_bought bigint 🔒	genre_name character varying (120) 🔒
1	War Pigs	31	Alternative
2	Highway Chile	14	Rock
3	Are You Experienced?	14	Rock
4	Changes	14	Metal
5	Hey Joe	13	Rock
6	Put The Finger On You	13	Rock
7	Third Stone From The Sun	13	Rock
8	We Are The Champions	12	Rock
9	Love Or Confusion	12	Rock
10	Drain You	12	Rock

-- Q3. What are the average prices of different types of music?

	genre_name character varying (120) 🔒	avg_price numeric 🔒
1	Soundtrack	0.990000
2	Electronica/Dance	0.990000
3	Reggae	0.990000
4	Easy Listening	0.990000
5	Blues	0.990000
6	R&B/Soul	0.990000
7	Alternative	0.990000
8	TV Shows	0.990000
9	Latin	0.990000
10	Hip Hop/Rap	0.990000
11	Drama	0.990000
12	Classical	0.990000
13	Pop	0.990000
14	Alternative & Punk	0.990000
15	Rock	0.990000
16	Jazz	0.990000
17	Metal	0.990000
18	Heavy Metal	0.990000
		...

-- Q4. Which countries made the most money from music purchases?

	billing_country character varying (30) 🔒	total_rev numeric 🔒
1	USA	1040.49
2	Canada	535.59
3	Brazil	427.68
4	France	389.07
5	Germany	334.62

-- Q5. Which genres have the shortest and longest tracks?

	genre_name character varying (120) 🔒	length_in_millisecs numeric 🔒
1	Rock And Roll	134643.50
2	Opera	174813.00
3	Hip Hop/Rap	178176.29
4	Easy Listening	189164.21
5	Bossa Nova	219590.00
6	R&B/Soul	220066.85
7	World	224923.82
8	Pop	229034.10
9	Latin	232859.26
10	Alternative & Punk	234353.85
11	Soundtrack	244370.88
12	Reggae	247177.76
13	Alternative	264058.53
14	Blues	270359.78
15	Rock	283910.04
16	Jazz	291755.38
17	Classical	293867.57
18	Heavy Metal	297452.93
19	Electronica/Dance	302985.80
20	Metal	309749.44
21	Comedy	1585263.71
22	TV Shows	2145041.02
23	Drama	2575283.78
24	Science Fiction	2625549.08
25	Sci Fi & Fantasy	2911783.04

-- Q6. Who is the senior most employee based on job title?

	employee_id [PK] character varying (50) 🔗	last_name character 🔗	first_name character 🔗	title character varying (50) 🔗	reports_to character varying (30) 🔗	levels character varying (10) 🔗
1	9	Madan	...	Mohan	...	Senior General Manager
					[null]	L7

-- Q7. Which countries have the most Invoices?

	billing_country character varying (30) 🔒	total_quantity bigint 🔒
1	USA	131
2	Canada	76
3	Brazil	61
4	France	50
5	Germany	41

-- Q8. What are the top 3 values of total invoice?

	total double precision 🔒
1	23.759999999999998
2	19.8
3	19.8

-- Q9. Which city has the best customers? We would like to throw a promotional Music Festival in the city we made the most money.

- Write a query that returns one city that has the highest sum of invoice totals.
- Return both the city name & sum of all invoice totals.

	billing_city character varying (30) 🔒	total_money double precision 🔒
1	Prague	273.240000000000007

-- Q10. Who is the best customer? The customer who has spent the most money will be declared the best customer.

-- Write a query that returns the person who has spent the most money.

	customer_id [PK] integer	first_name character	last_name character	total_money double precision
1	5	R	Madhav	144.54000000000002


-- Q11. Write a query to return the email, first name, last name, & Genre of all Rock Music listeners.

-- Return your list ordered alphabetically by email starting with A

	email character varying (50)	first_name character	last_name character	name character varying (120)
1	aaronmitchell@yahoo.ca	Aaron	Mitchell	Rock
2	alero@uol.com.br	Alexandre	Rocha	Rock
3	astrid.gruber@apple.at	Astrid	Gruber	Rock
4	bjorn.hansen@yahoo.no	Bjørn	Hansen	Rock
5	camille.bernard@yahoo.fr	Camille	Bernard	Rock
6	daan_peeters@apple.be	Daan	Peeters	Rock
7	diego.gutierrez@yahoo.ar	Diego	Gutiérrez	Rock
8	dmiller@comcast.com	Dan	Miller	Rock
9	dominiquelefebvre@gmail.c...	Dominique	Lefebvre	Rock
10	edfrancis@yachoo.ca	Edward	Francis	Rock
11	eduardo@woodstock.com.br	Eduardo	Martins	Rock
12	ellie.sullivan@shaw.ca	Ellie	Sullivan	Rock
13	emma_jones@hotmail.com	Emma	Jones	Rock
14	enrique_munoz@yahoo.es	Enrique	Muñoz	Rock

...

- Q12. Let's invite the artists who have written the most rock music in our dataset.
- Write a query that returns the Artist name and total track count of the top 10 rock bands.

	name character varying (120) 	total_songs bigint 
1	Led Zeppelin	114
2	U2	112
3	Deep Purple	92
4	Iron Maiden	81
5	Pearl Jam	54
6	Van Halen	52
7	Queen	45
8	The Rolling Stones	41
9	Creedence Clearwater Revival	40
10	Kiss	35

- Q13. Return all the track names that have a song length longer than the average song length.
- Return the Name and Milliseconds for each track. Order by the song length with the longest songs listed first.

	song_name character varying (150) 🔒	milliseconds integer 🔒
1	Occupation / Precipice	5286953
2	Through a Looking Glass	5088838
3	Greetings from Earth, Pt. 1	2960293
4	The Man With Nine Lives	2956998
5	Battlestar Galactica, Pt. 2	2956081
6	Battlestar Galactica, Pt. 1	2952702
7	Murder On the Rising Star	2935894
8	Battlestar Galactica, Pt. 3	2927802
9	Take the Celestra	2927677
10	Fire In Space	2926593
11	The Long Patrol	2925008
12	The Magnificent Warriors	2924716
13	The Living Legend, Pt. 1	2924507
14	The Gun On Ice Planet Zero, Pt. 2	2924341

...

-- Q14. Find how much amount is spent by each customer on artists.

-- Write a query to return the customer name, artist name, and total spent.

	customer_name text	name character varying (120)	total_spent numeric
1	Hugh O'Reilly	Queen	27.72
2	Wyatt Girard	Frank Sinatra	23.76
3	Helena Holý	Red Hot Chili Peppers	19.80
4	François Tremblay	The Who	19.80
5	Robert Brown	Creedence Clearwater Revival	19.80
6	Aaron Mitchell	James Brown	19.80
7	R Madhav	Kiss	19.80
8	Heather Leacock	House Of Pain	18.81
9	Niklas Schröder	Queen	18.81
10	Hugh O'Reilly	Nirvana	18.81
11	Richard Cunningham	Marvin Gaye	17.82
12	Luís Gonçalves	The Cult	17.82
13	François Tremblay	Queen	17.82
14	Dan Miller	Eric Clapton	17.82

...

-- Q15. We want to find out the most popular music genre for each country.

-- We determine the most popular genre as the genre with the highest amount of purchases.

- Write a query that returns each country along with the top genre.
- For countries where the maximum number of purchases is shared, return all genres.

	country character varying (50) 🔒	genre_name character varying (120) 🔒	purchases bigint 🔒	rank bigint 🔒
1	USA	Rock	561	1
2	Canada	Rock	333	1
3	France	Rock	211	1
4	Brazil	Rock	205	1
5	Germany	Rock	194	1
6	United Kingdom	Rock	166	1
7	Czech Republic	Rock	143	1
8	Portugal	Rock	108	1
9	India	Rock	102	1
10	Ireland	Rock	72	1
11	Chile	Rock	61	1
12	Sweden	Rock	60	1
13	Finland	Rock	46	1
14	Spain	Rock	46	1

- Q16. Write a query that determines the customer that has spent the most on music for each country.
- Write a query that returns the country along with the top customer and how much they spent.

-- For countries where the top amount spent is shared, provide all customers who spent this amount.

	country character varying (30) 🔒	customer_name text 🔒	total_spent numeric 🔒	rank bigint 🔒
1	Argentina	Diego Gutiérrez	39.60	1
2	Australia	Mark Taylor	81.18	1
3	Austria	Astrid Gruber	69.30	1
4	Belgium	Daan Peeters	60.39	1
5	Brazil	Luís Gonçalves	108.90	1
6	Canada	François Tremblay	99.99	1
7	Chile	Luis Rojas	97.02	1
8	Czech Republic	R Madhav	144.54	1
9	Denmark	Kara Nielsen	37.62	1
10	Finland	Terhi Hämäläinen	79.20	1
11	France	Wyatt Girard	99.99	1
12	Germany	Fynn Zimmermann	94.05	1
13	Hungary	Ladislav Kovács	78.21	1
14	India	Manoj Pareek	111.87	1

...