

Music Store

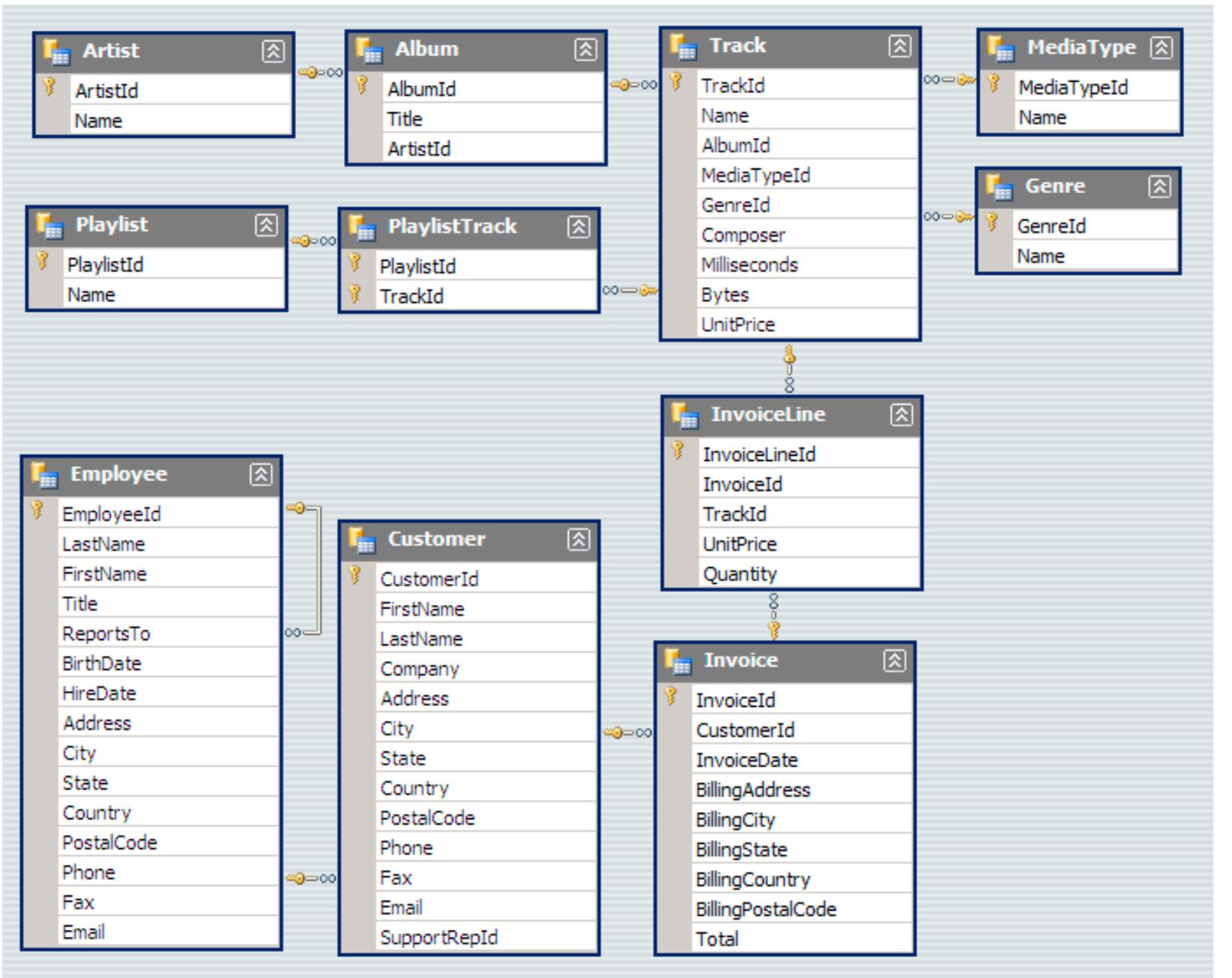
Let's sing and play!

Instruction

Pay close attention to each instruction
on the question. Sing or play the right
song. Play in order!

Let's start!

Schema



Question Set - 1

1. Who is the senior most employee based on job title?
2. Which countries have the most Invoices?
3. What are top 3 values of total invoice?
4. 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
5. 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

```
1 -- Q1: Who is the senior most employee based on job title?  
2  
3  
4 • SELECT  
5     title, last_name, first_name  
6 FROM  
7     employee  
8 ORDER BY levels DESC  
9 LIMIT 1
```

	title	last_name	first_name
▶	General Manager	Adams	Andrew

```
1  
2 -- Q2: Which countries have the most Invoices?  
3  
4 • SELECT  
5     COUNT(*) AS c, billing_country  
6 FROM  
7     invoice  
8 GROUP BY billing_country  
9 ORDER BY c DESC
```

Result Grid | Filter Rows:

	c	billing_country
▶	131	USA
	76	Canada
	61	Brazil
	50	France
	41	Germany
	30	Czech Republic
	29	Portugal
	28	United Kingdom
	21	India
	13	Ireland

-- Q3: What are top 3 values of total invoice?

```
1
2
3
4 • SELECT
5     total
6
7     FROM
8     invoice
9
10    ORDER BY total DESC limit 3 ;
```

Result Grid | Filter

	total
▶	23.759999999999998
	19.8
	19.8

```
1
2  -- Q4: Which city has the best customers? We would like to throw a promotional Music Festival in the city we made the most money.
3  -- Write a query that returns one city that has the highest sum of invoice totals.
4  -- Return both the city name & sum of all invoice totals
5
6 • SELECT
7      billing_city, SUM(total) AS InvoiceTotal
8  FROM
9      invoice
10 GROUP BY billing_city
11 ORDER BY InvoiceTotal DESC
12 LIMIT 1;
```

Result Grid | Filter Rows:

	billing_city	InvoiceTotal
▶	Prague	273.24000000000007

```
1  -- Q5: Who is the best customer? The customer who has spent the most money will be declared the best customer.
2  -- Write a query that returns the person who has spent the most money.
3
4 • SELECT
5     customer.customer_id,
6     first_name,
7     last_name,
8     SUM(total) AS total_spending
9 FROM
10    customer
11   JOIN
12     invoice ON customer.customer_id = invoice.customer_id
13 GROUP BY customer.customer_id , first_name , last_name
14 ORDER BY total_spending DESC
15 LIMIT 1;
```

Result Grid | Filter Rows: Export:

	customer_id	first_name	last_name	total_spending
▶	5	František	Wichterlová	144.5400000000002

Question Set - 2

1. Write 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
2. 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
3. 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

```

1
2    -- Q1: Write query to return the email, first name, last name, & Genre of all Rock Music listeners.
3    -- Return your list ordered alphabetically by email starting with A.
4
5 •  SELECT DISTINCT email,first_name, last_name
6    FROM customer
7    JOIN invoice ON customer.customer_id = invoice.customer_id
8    JOIN invoiceline ON invoice.invoice_id = invoiceline.invoice_id
9    WHERE track_id IN(
10        SELECT track_id FROM track
11        JOIN genre ON track.genre_id = genre.genre_id
12        WHERE genre.name LIKE 'Rock'
13    )
14    ORDER BY email;
15

```

email	first_name	last_name
fharris@google.com	Frank	Harris
fralston@gmail.com	Frank	Ralston
frantisekw@jetbrains.com	František	Wichterlová
ftremblay@gmail.com	François	Tremblay
fzimmermann@yahoo.de	Fynn	Zimmermann
hannah.schneider@yahoo.de	Hannah	Schneider
hholly@gmail.com	Helena	Holáčková
hleacock@gmail.com	Heather	Leacock
hughoreilly@apple.ie	Hugh	O'Reilly
isabelle_mercier@apple.fr	Isabelle	Mercier
jacksmith@microsoft.com	Jack	Smith
jenniferp@rogers.ca	Jennifer	Peterson
jfernandes@yahoo.pt	João	Fernandes
joakim.johansson@yahoo.se	Joakim	Johansson
johavanderberg@yahoo.nl	Johannes	Van der Berg

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johngordon22@yahoo.com	John	Gordon
jubarnett@gmail.com	Julia	Barnett
kachase@hotmail.com	Kathy	Chase
kara.nielsen@jubii.dk	Kara	Nielsen
ladislav_kovacs@apple.hu	Ladislav	Kovács
leonekohler@surfeu.de	Leonie	Köhler
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luisrojas@yahoo.cl	Luis	Rojas
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mphilips12@shaw.ca	Mark	Philips

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tgoyer@apple.com	Tim	Goyer
vstevens@yahoo.com	Victor	Stevens
wyatt.girard@yahoo.fr	Wyatt	Girard

```
1
2      -- Q2: Let's invite the artists who have written the most rock music in our dataset.
3      -- Write a query that returns the Artist name and total track count of the top 10 rock bands.
4
5 • SELECT artist.artist_id, artist.name,COUNT(artist.artist_id) AS number_of_songs
6     FROM track
7     JOIN album ON album.album_id = track.album_id
8     JOIN artist ON artist.artist_id = album.artist_id
9     JOIN genre ON genre.genre_id = track.genre_id
10    WHERE genre.name LIKE 'Rock'
11    GROUP BY artist.artist_id
12    ORDER BY number_of_songs DESC
13    LIMIT 10;
```

Result Grid | Filter Rows: Export:

	artist_id	name	number_of_songs
▶	1	AC/DC	18
	3	Aerosmith	15
	8	Audioslave	14
	22	Led Zeppelin	14
	4	Alanis Morissette	13
	5	Alice In Chains	12
	23	Frank Zappa & Captain Beefheart	9
	2	Accept	4

```
1
2      -- Q3: Return all the track names that have a song length longer than the average song length.
3      -- Return the Name and Milliseconds for each track. Order by the song length with the longest songs listed first.
4
5 • SELECT
6      name, milliseconds
7  FROM
8      track
9  WHERE
10     milliseconds > (SELECT
11         AVG(milliseconds) AS avg_track_length
12     FROM
13         track)
14 ORDER BY milliseconds DESC limit 10;
15
```

Result Grid | Filter Rows: Export

	name	milliseconds
▶	How Many More Times	711836
	Advance Romance	677694
	Sleeping Village	644571
	You Shook Me(2)	619467
	Talkin' 'Bout Women Obviously	589531
	Stratus	582086
	No More Tears	555075
	The Alchemist	509413
	Wheels Of Confusion / The Straightener	494524
	Book Of Thel	494393

Question Set - 3

1. 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 number 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

```
1 -- Q1: We want to find out the most popular music Genre for each country. We determine the most popular genre as the genre  
2 -- with the highest amount of purchases. Write a query that returns each country along with the top Genre. For countries where  
3 -- the maximum number of purchases is shared return all Genres.  
4  
5 • WITH popular_genre AS  
6   (SELECT COUNT(invoice_line.quantity) AS purchases, customer.country, genre.name, genre.genre_id,  
7    ROW_NUMBER() OVER(PARTITION BY customer.country ORDER BY COUNT(invoice_line.quantity) DESC) AS RowNo  
8    FROM invoice_line  
9    JOIN invoice ON invoice.invoice_id = invoice_line.invoice_id  
10   JOIN customer ON customer.customer_id = invoice.customer_id  
11   JOIN track ON track.track_id = invoice_line.track_id  
12   JOIN genre ON genre.genre_id = track.genre_id  
13   GROUP BY 2,3,4  
14   ORDER BY 2 ASC, 1 desc limit 1)  
15  SELECT * FROM popular_genre WHERE RowNo <= 1
```

Result Grid | Filter Rows: _____ | Export:

	purchases	country	name	genre_id	RowNo
▶	1	Argentina	Rock	1	1



*Thank you for
playing!*

