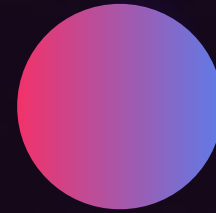




MUSIC STORE





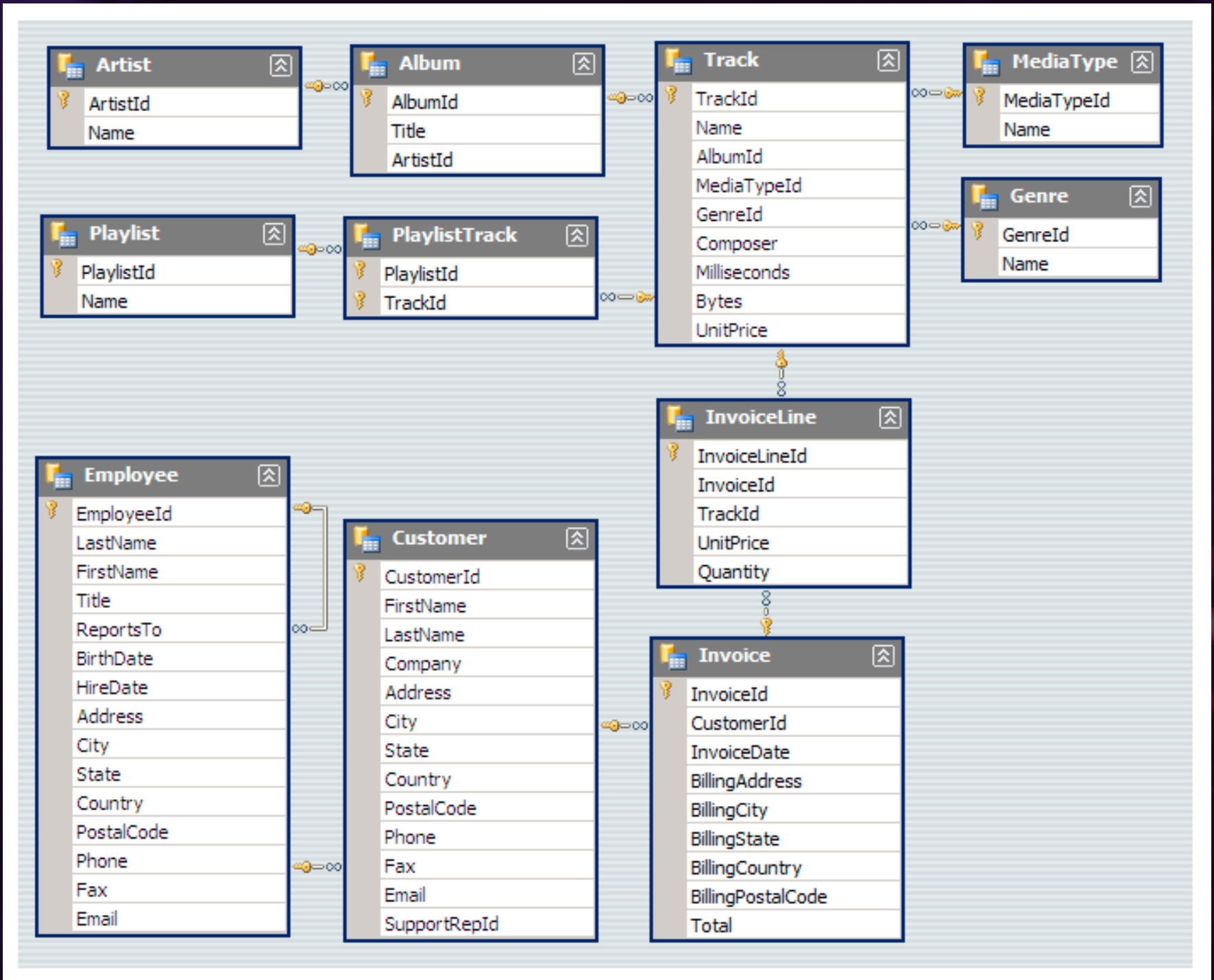
Introduction

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

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
2  -- Q1: Who is the senior most employee based on job title?
3
4 •  SELECT
5      title, last_name, first_name
6  FROM
7      employee
8  ORDER BY levels DESC
9  LIMIT 1
10
```

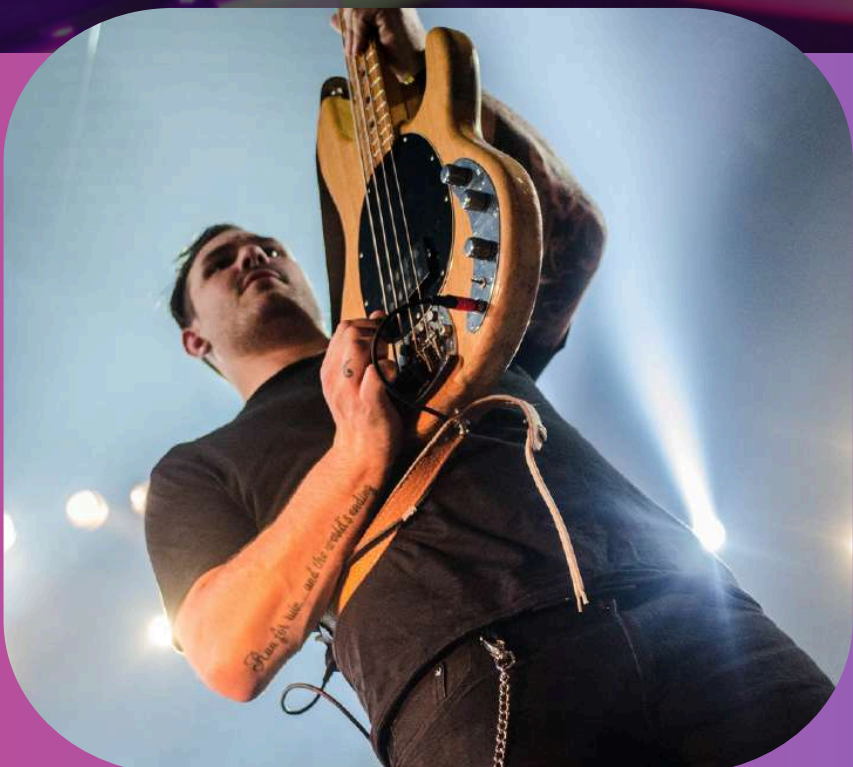


	title	last_name	first_name
▶	General Manager	Adams	Andrew


```
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	





```
1
2  -- Q3: What are top 3 values of total invoice?
3
4  ●  SELECT
5      total
6  FROM
7      invoice
8  ORDER BY total DESC limit 3 ;
9
```

Result Grid



	total
▶	23.759999999999999999998
	19.8
	19.8





```
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:

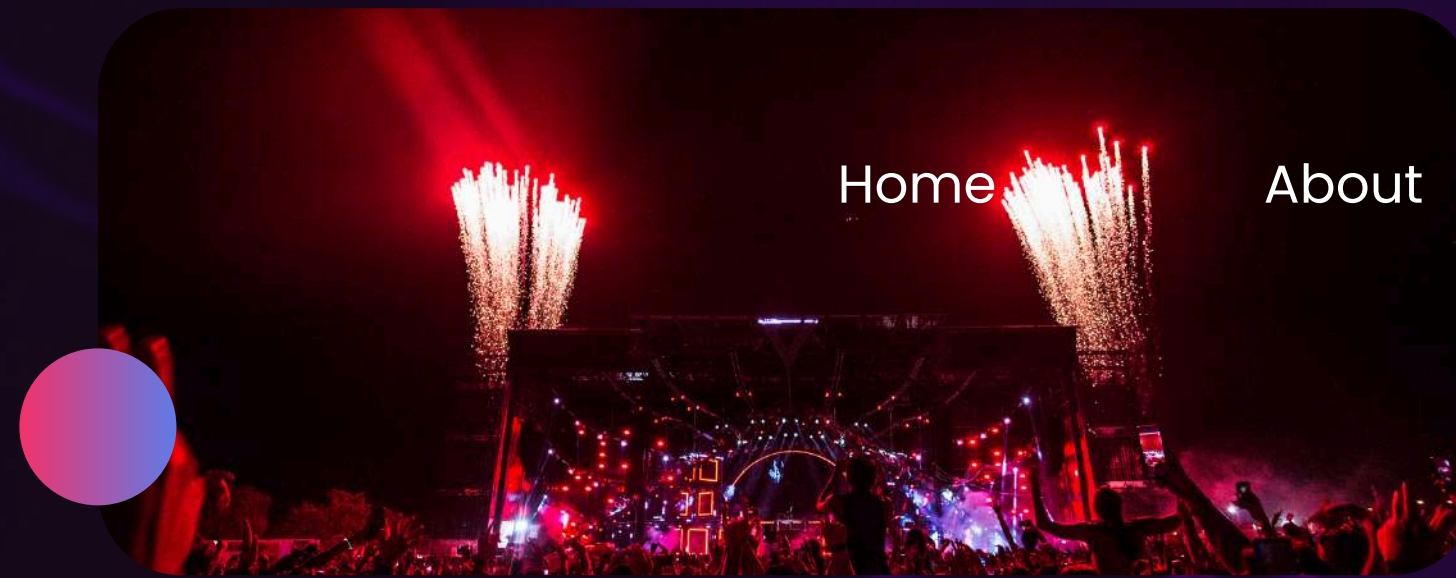
	billing_city	InvoiceTotal
	Prague	273.2400000000000007

MUSIC PARTY



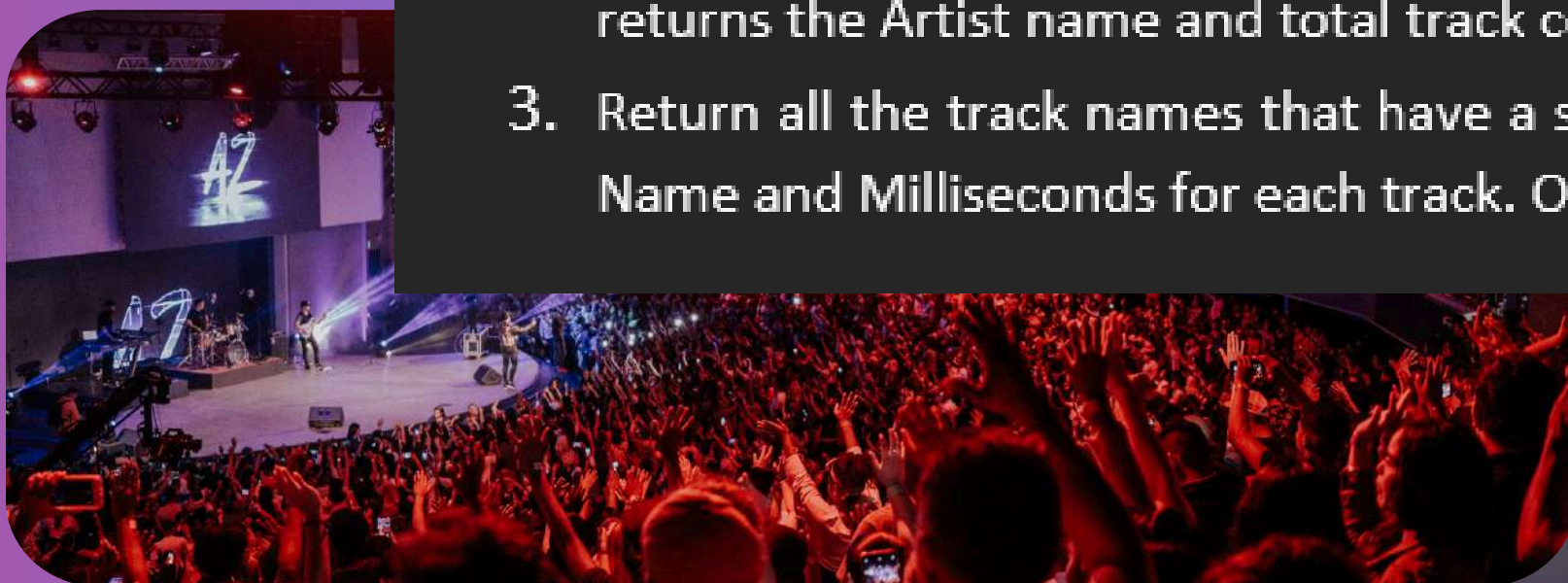
```
1  -- Q5: Who is the best customer? The customer who has spent the most money will be declared the best customer.
2  -- Write a query that returns the person who has spent the most money.
3
4  • SELECT
5      customer.customer_id,
6      first_name,
7      last_name,
8      SUM(total) AS total_spending
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: <input type="text"/> Export:  				
	customer_id	first_name	last_name	total_spending
▶	5	František	Wichterlovský	144.54000000000002



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	Wichterlov
ftremblay@gmail.com	François	Tremblay
fzimmermann@yahoo.de	Fynn	Zimmermann
hannah.schneider@yahoo.de	Hannah	Schneider
hholy@gmail.com	Helena	Holý
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




email	first_name	last_name
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
lucas.mancini@yahoo.it	Lucas	Mancini
luisg@embraer.com.br	Luís	Gonçalves
luisrojas@yahoo.cl	Luis	Rojas
manoj.pareek@rediff.com	Manoj	Pareek
marc.dubois@hotmail.com	Marc	Dubois
mark.taylor@yahoo.au	Mark	Taylor
marthasilk@gmail.com	Martha	Silk
masampaio@sapo.pt	Madalena	Sampaio
mphilips12@shaw.ca	Mark	Philips

email	first_name	last_name
aaronmitchell@yahoo.ca	Aaron	Mitchell
alero@uol.com.br	Alexandre	Rocha
astrid.gruber@apple.at	Astrid	Gruber
bjorn.hansen@yahoo.no	Bjørn	Hansen
camille.bernard@yahoo.fr	Camille	Bernard
daan_peeters@apple.be	Daan	Peeters
diego.gutierrez@yahoo.ar	Diego	Gutiérrez
dmiller@comcast.com	Dan	Miller
dominiquelefebvre@gmail.com	Dominique	Lefebvre
edfrancis@yahoo.ca	Edward	Francis
eduardo@woodstock.com.br	Eduardo	Martins
ellie.sullivan@shaw.ca	Ellie	Sullivan
emma_jones@hotmail.com	Emma	Jones
enrique_munoz@yahoo.es	Enrique	Muñoz
fernadaramos4@uol.com.br	Fernanda	Ramos

email	first_name	last_name
mphilips12@shaw.ca	Mark	Philips
nschroder@surfeu.de	Niklas	Schröder
patrick.gray@aol.com	Patrick	Gray
phil.hughes@gmail.com	Phil	Hughes
ricunningham@hotmail.com	Richard	Cunningham
rishabh_mishra@yahoo.in	Rishabh	Mishra
robbrown@shaw.ca	Robert	Brown
roberto.almeida@riotur.gov.br	Roberto	Almeida
stanisław.wójcik@wp.pl	Stanisław	Wójcik
steve.murray@yahoo.uk	Steve	Murray
terhi.hamalainen@apple.fi	Terhi	Hämäläinen
tgoyer@apple.com	Teri	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: <input type="text"/> 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	Avery Davis582086		
	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 Your Attention

