

MUSIC STORE ANALYSIS

Q1: Who is the senior most employee based on job title?

```
1
2 • SELECT title, last_name, first_name
3 FROM employee
4 ORDER BY levels DESC
5 LIMIT 1;
```

<

Result Grid

Filter Rows:

Export:

Wrap Cell Content:




Fetch rows:

	title	last_name	first_name
▶	General Manager	Adams	Andrew

Q2.Which countries have the most Invoices?

```
3
4 • SELECT COUNT(*) AS c, billing_country
5   FROM invoice
6   GROUP BY billing_country
7   ORDER BY c DESC;
```

<

Result Grid |   Filter Rows: | Export:  | Wrap Cell Cont

	c	billing_country
▶	131	USA
	76	Canada
	61	Brazil
	50	France
	41	Germany
	30	Czech Republic

Result 3 x

Q3.What are top 3 values of total invoice?

Limit to 1000 rows

1

2

3

4 • `SELECT total`

5 `FROM invoice`

6 `ORDER BY total DESC`

<

Result Grid

Filter Rows:

Export:

Wrap Cell

	total
▶	23.759999999999998
	19.8
	19.8
	19.8
	19.8
	18.81




invoice 4 ×

Q4: 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**

```
1  
2  
3  
4 • SELECT billing_city, SUM(total) AS InvoiceTotal  
5 FROM invoice  
6 GROUP BY billing_city  
7 ORDER BY InvoiceTotal DESC  
8 LIMIT 1;
```

<

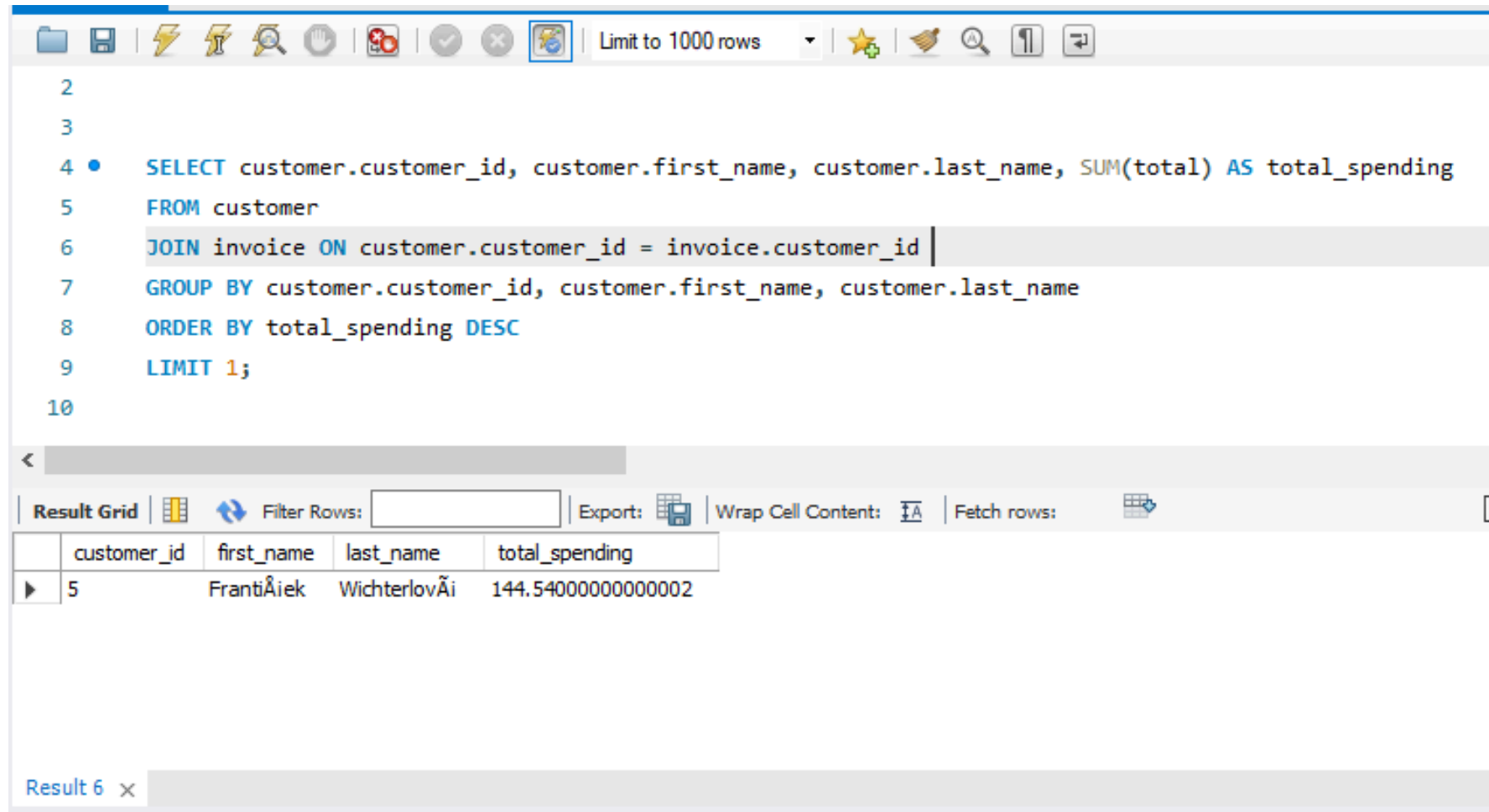
Result Grid |  Filter Rows: | Export:  | Wrap Cell Content: 

	billing_city	InvoiceTotal
▶	Prague	273.24000000000007

Result 5 x

Q5: 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



The screenshot shows a SQL query editor with a toolbar at the top containing icons for file operations, execution, and settings. A dropdown menu indicates "Limit to 1000 rows". The query is as follows:

```
2  
3  
4 • SELECT customer.customer_id, customer.first_name, customer.last_name, SUM(total) AS total_spending  
5 FROM customer  
6 JOIN invoice ON customer.customer_id = invoice.customer_id  
7 GROUP BY customer.customer_id, customer.first_name, customer.last_name  
8 ORDER BY total_spending DESC  
9 LIMIT 1;  
10
```

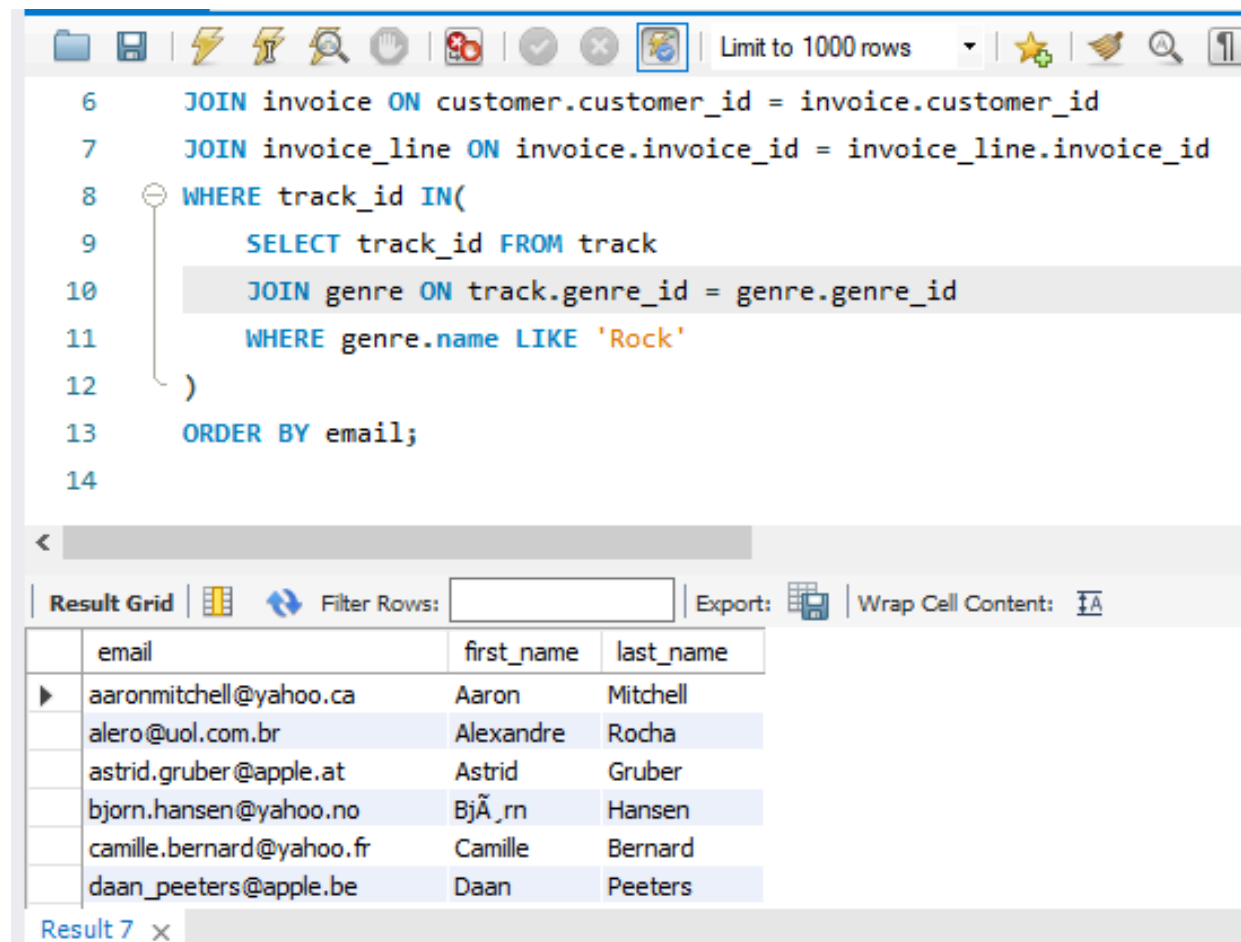
Below the query editor is a "Result Grid" section. It includes a "Filter Rows" input field, an "Export" button, a "Wrap Cell Content" checkbox, and a "Fetch rows" button. The grid displays the following data:

	customer_id	first_name	last_name	total_spending
▶	5	František	Wichterlová	144.54000000000002

At the bottom, a tab labeled "Result 6" is visible.

Q6: 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



```
6 JOIN invoice ON customer.customer_id = invoice.customer_id
7 JOIN invoice_line ON invoice.invoice_id = invoice_line.invoice_id
8 WHERE track_id IN(
9     SELECT track_id FROM track
10     JOIN genre ON track.genre_id = genre.genre_id
11     WHERE genre.name LIKE 'Rock'
12 )
13 ORDER BY email;
14
```

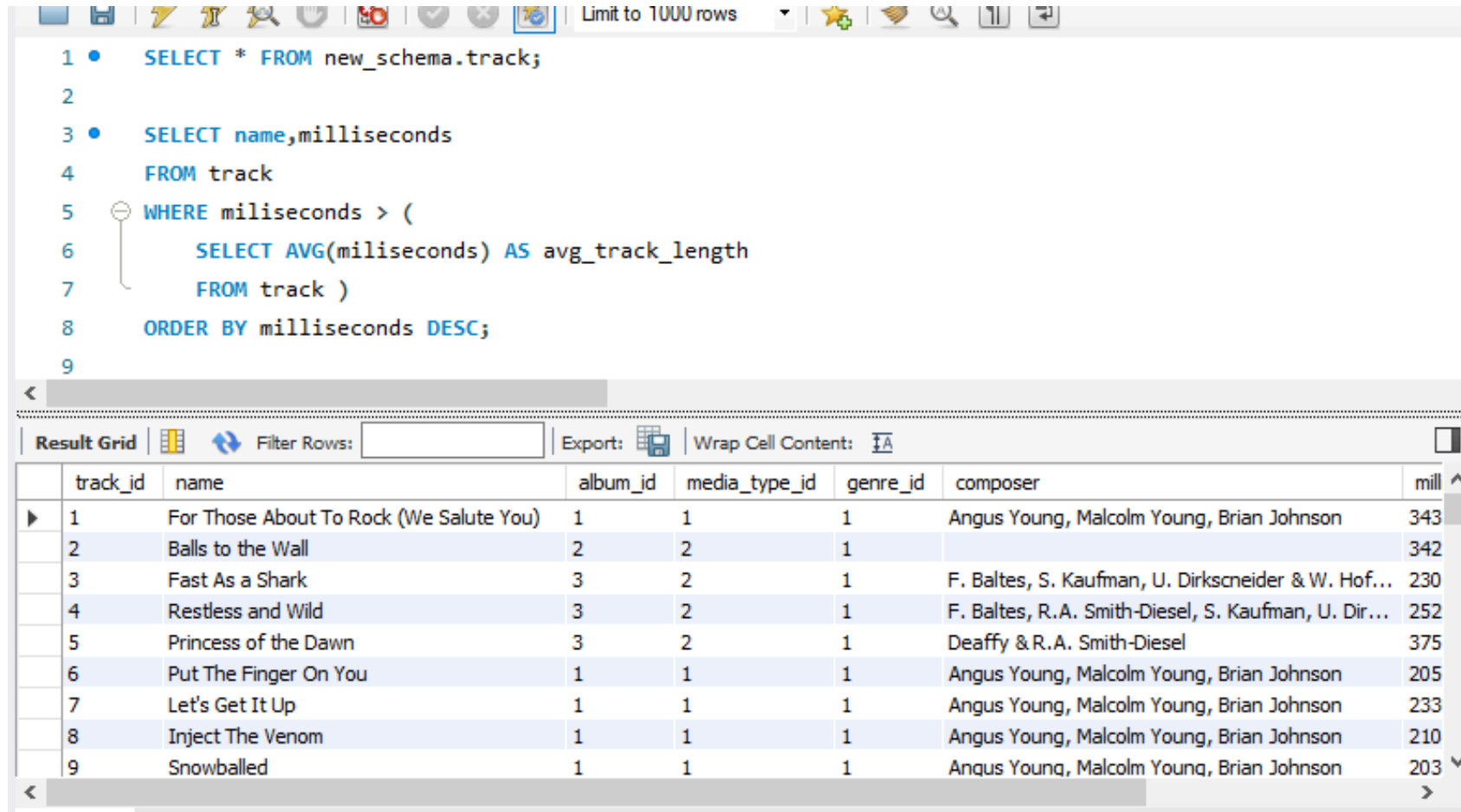
Result Grid

	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	Björn	Hansen
	camille.bernard@yahoo.fr	Camille	Bernard
	daan_peeters@apple.be	Daan	Peeters

Result 7 x

Q7: 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 screenshot shows a SQL query editor with a toolbar at the top. The query is as follows:

```
1 • SELECT * FROM new_schema.track;
2
3 • SELECT name,milliseconds
4 FROM track
5 WHERE milliseconds > (
6     SELECT AVG(milliseconds) AS avg_track_length
7     FROM track )
8 ORDER BY milliseconds DESC;
9
```

Below the query editor is the 'Result Grid' tab. It includes a 'Filter Rows' input field, an 'Export' button, and a 'Wrap Cell Content' checkbox. The results are displayed in a table with 9 rows and 8 columns. The columns are: track_id, name, album_id, media_type_id, genre_id, composer, and mill (milliseconds). The rows are ordered by milliseconds in descending order.

	track_id	name	album_id	media_type_id	genre_id	composer	mill
▶	1	For Those About To Rock (We Salute You)	1	1	1	Angus Young, Malcolm Young, Brian Johnson	343
	2	Balls to the Wall	2	2	1		342
	3	Fast As a Shark	3	2	1	F. Baltes, S. Kaufman, U. Dirksneider & W. Hof...	230
	4	Restless and Wild	3	2	1	F. Baltes, R.A. Smith-Diesel, S. Kaufman, U. Dir...	252
	5	Princess of the Dawn	3	2	1	Deaffy & R.A. Smith-Diesel	375
	6	Put The Finger On You	1	1	1	Angus Young, Malcolm Young, Brian Johnson	205
	7	Let's Get It Up	1	1	1	Angus Young, Malcolm Young, Brian Johnson	233
	8	Inject The Venom	1	1	1	Angus Young, Malcolm Young, Brian Johnson	210
	9	Snowballed	1	1	1	Anqus Young, Malcolm Young, Brian Johnson	203

Q8: 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.

Steps to Solve: There are two parts in question- first most popular music genre and second need data at country level.

```
1 WITH popular_genre AS (  
2     SELECT  
3         COUNT(invoice_line.quantity) AS purchases,  
4         customer.country,  
5         genre.name,  
6         genre.genre_id,  
7         ROW_NUMBER() OVER(PARTITION BY customer.country ORDER BY COUNT(invoice_line.quantity) DESC) AS RowNo  
8     FROM  
9         invoice_line  
10    JOIN invoice ON invoice.invoice_id = invoice_line.invoice_id  
11    JOIN customer ON customer.customer_id = invoice.customer_id
```

Result Grid

	purchases	country	name	genre_id	RowNo
1		Argentina	Rock	1	1
18		Australia	Rock	1	1
6		Austria	Rock	1	1
5		Belgium	Rock	1	1
26		Brazil	Rock	1	1
57		Canada	Rock	1	1
7		Chile	Rock	1	1
14		Czech Republic	Rock	1	1

Result 3 x

Output

Q9: 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.

Steps to Solve: Similar to the above question. There are two parts in question- first find the most spent on music for each country and second filter the data for respective customers

```
1 WITH Customer_with_country AS (  
2     SELECT customer.customer_id,first_name,last_name,billing_country,SUM(total) AS total_spending,  
3     ROW_NUMBER() OVER(PARTITION BY billing_country ORDER BY SUM(total) DESC) AS RowNo  
4     FROM invoice  
5     JOIN customer ON customer.customer_id = invoice.customer_id  
6     GROUP BY 1,2,3,4  
7     ORDER BY 4 ASC,5 DESC)  
8 SELECT * FROM Customer_with_country WHERE RowNo <= 1  
9
```

customer_id	first_name	last_name	billing_country	total_spending	RowNo
56	Diego	Gutiérrez	Argentina	39.6	1
55	Mark	Taylor	Australia	81.18	1
7	Astrid	Gruber	Austria	69.3	1
8	Daan	Peeters	Belgium	60.38999999999999	1
1	Luís	Gonçalves	Brazil	108.89999999999998	1
3	François	Tremblay	Canada	99.99	1
57	Luis	Rojas	Chile	97.02000000000001	1
5	František	Wichterlovský	Czech Republic	144.54000000000002	1