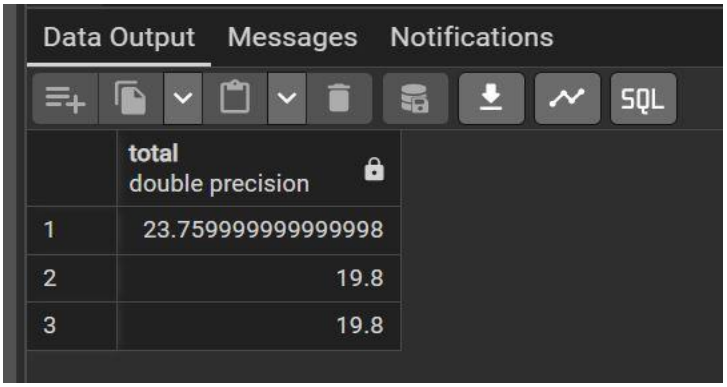
Rocks Music Store Report

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

```
SELECT total
FROM invoice
ORDER BY total DESC
LIMIT 3;
```

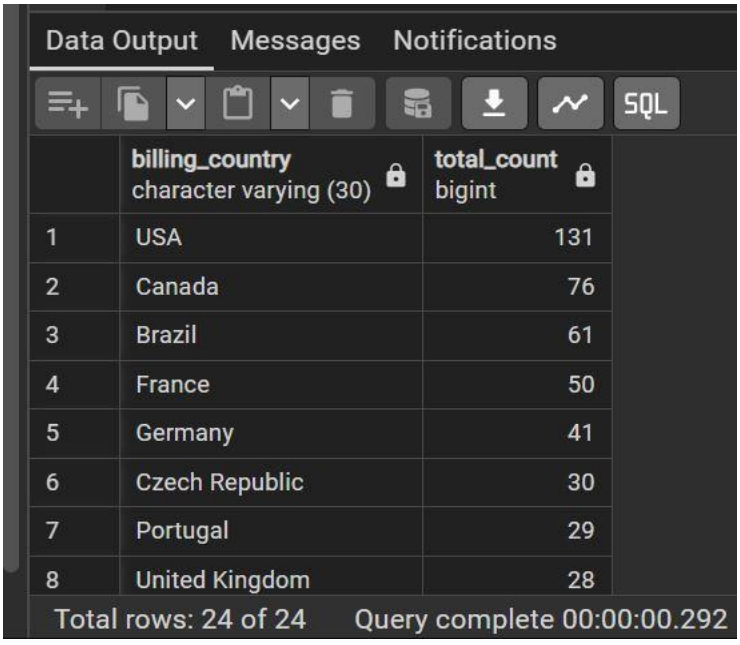


Data Output | Messages | Notifications

	total double precision
1	23.759999999999998
2	19.8
3	19.8

-- Q. Which countries have the most invoices?

```
SELECT billing_country, COUNT(*) AS total_count
FROM invoice
GROUP BY billing_country
ORDER BY total_count DESC;
```



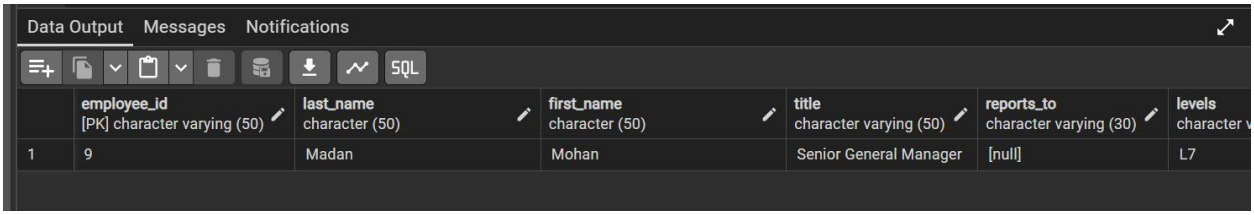
Data Output | Messages | Notifications

	billing_country character varying (30)	total_count bigint
1	USA	131
2	Canada	76
3	Brazil	61
4	France	50
5	Germany	41
6	Czech Republic	30
7	Portugal	29
8	United Kingdom	28

Total rows: 24 of 24 Query complete 00:00:00.292

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

```
SELECT *
FROM employee
ORDER BY levels DESC
LIMIT 1;
```

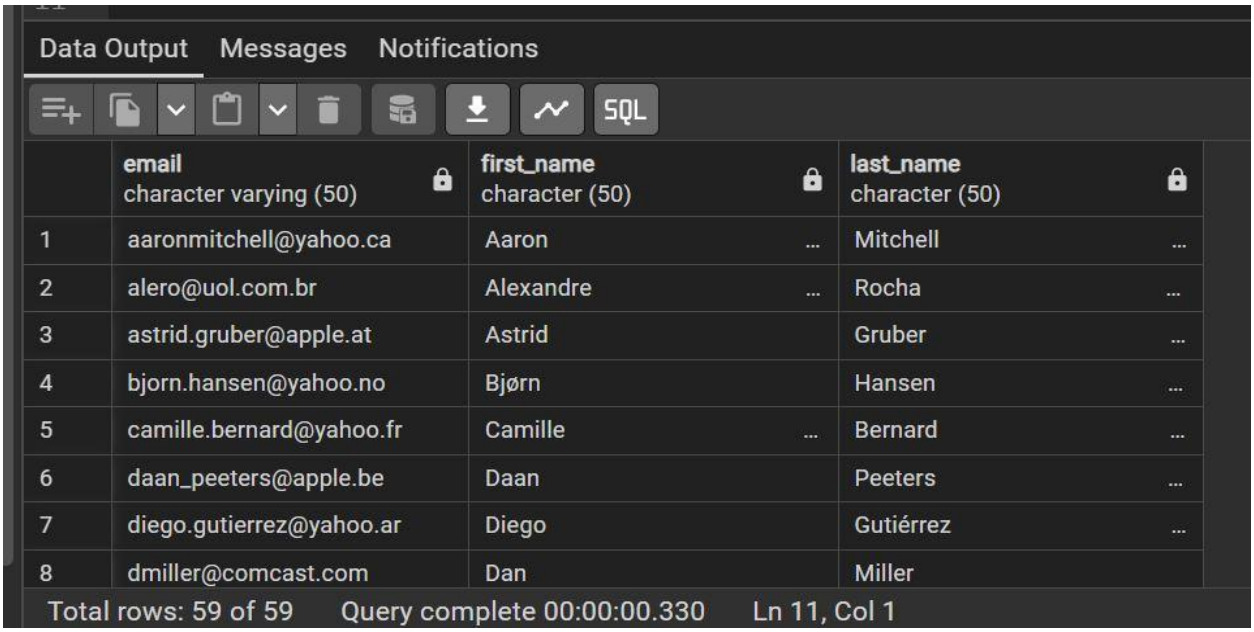


Data Output | Messages | Notifications

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

-- Q. 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

```
SELECT DISTINCT email, first_name, last_name
FROM customer
JOIN invoice ON customer.customer_id = invoice.customer_id
JOIN invoice_line ON invoice.invoice_id = invoice_line.invoice_id
WHERE track_id IN(
                    SELECT track_id FROM track
                    JOIN genre ON track.genre_id = genre.genre_id
                    WHERE genre.name LIKE 'Rock'
)
ORDER BY email ASC;
```



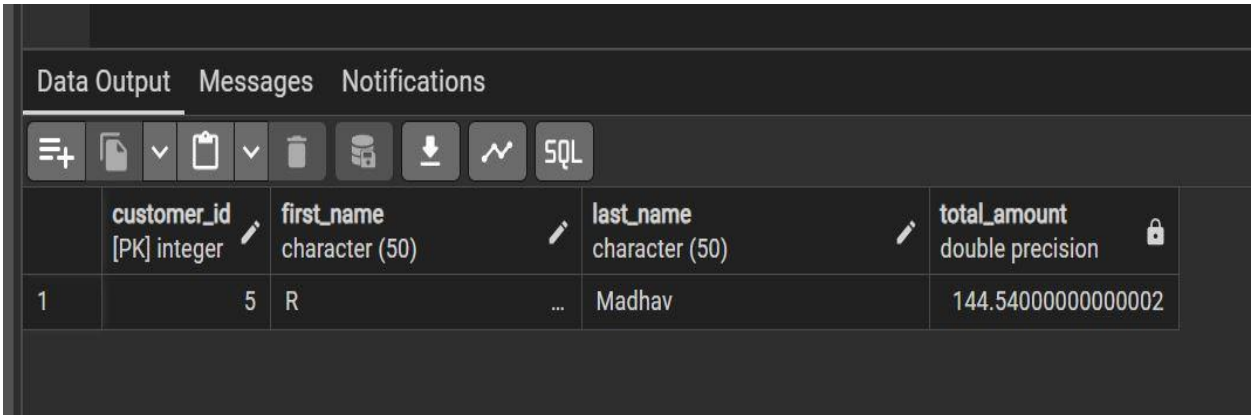
Data Output | Messages | Notifications

	email character varying (50)	first_name character (50)	last_name character (50)
1	aaronmitchell@yahoo.ca	Aaron	Mitchell
2	alero@uol.com.br	Alexandre	Rocha
3	astrid.gruber@apple.at	Astrid	Gruber
4	bjorn.hansen@yahoo.no	Bjørn	Hansen
5	camille.bernard@yahoo.fr	Camille	Bernard
6	daan_peeters@apple.be	Daan	Peeters
7	diego.gutierrez@yahoo.ar	Diego	Gutiérrez
8	dmiller@comcast.com	Dan	Miller

Total rows: 59 of 59 Query complete 00:00:00.330 Ln 11, Col 1

-- Q. 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

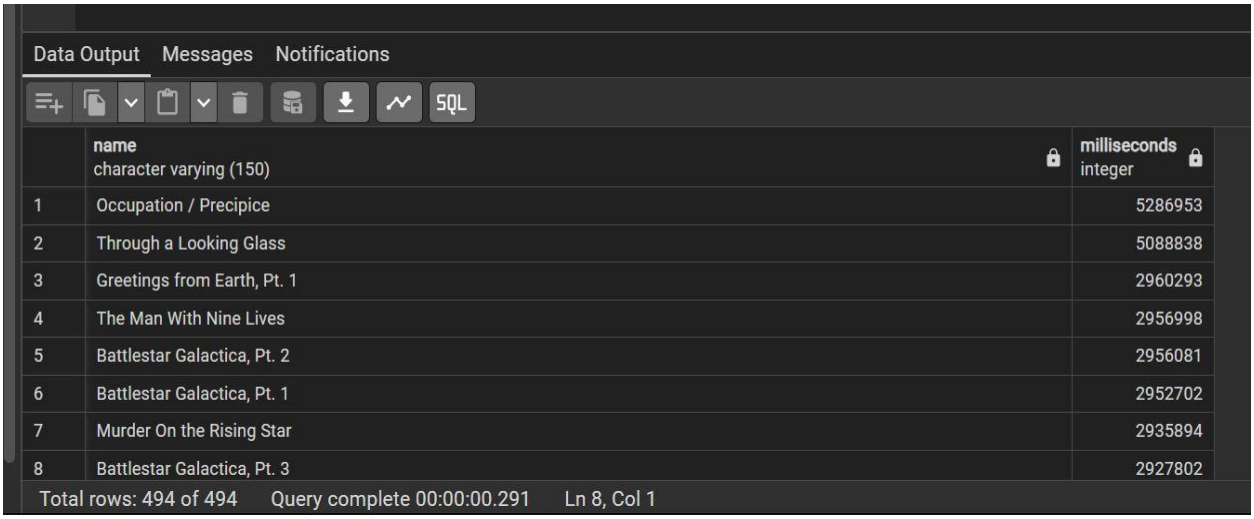
```
SELECT customer.customer_id, customer.first_name, customer.last_name, SUM(invoice.total)
AS total_amount
FROM customer
JOIN invoice
ON customer.customer_id = invoice.customer_id
GROUP BY customer.customer_id
ORDER BY total_amount DESC
LIMIT 1;
```



	customer_id [PK] integer	first_name character (50)	last_name character (50)	total_amount double precision
1	5	R ...	Madhav	144.54000000000002

-- Q. 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

```
SELECT name,milliseconds
FROM track
WHERE milliseconds > (
                SELECT AVG(milliseconds) AS avg_track_length
                FROM track
)
ORDER BY milliseconds DESC;
```



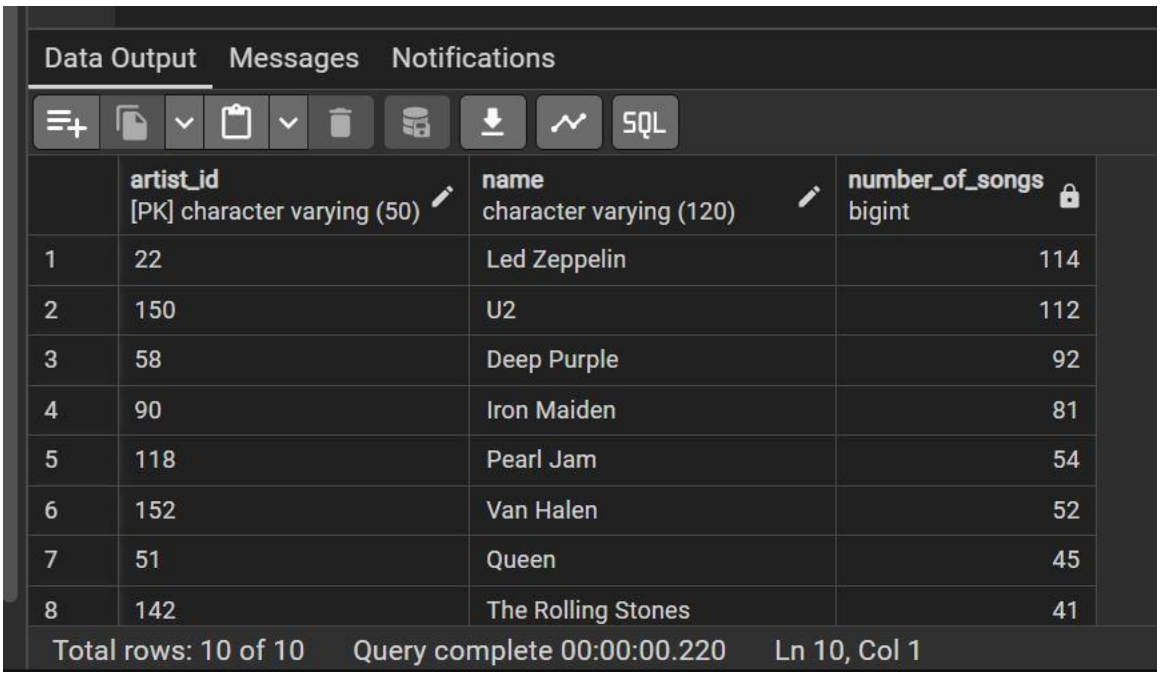
Data Output | Messages | Notifications

	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

Total rows: 494 of 494 Query complete 00:00:00.291 Ln 8, Col 1

-- Q. 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

```
SELECT artist.artist_id, artist.name,COUNT(artist.artist_id) AS number_of_songs
FROM track
JOIN album ON album.album_id = track.album_id
JOIN artist ON artist.artist_id = album.artist_id
JOIN genre ON genre.genre_id = track.genre_id
WHERE genre.name LIKE 'Rock'
GROUP BY artist.artist_id
ORDER BY number_of_songs DESC
LIMIT 10;
```



Data Output | Messages | Notifications

	artist_id [PK] character varying (50)	name character varying (120)	number_of_songs bigint
1	22	Led Zeppelin	114
2	150	U2	112
3	58	Deep Purple	92
4	90	Iron Maiden	81
5	118	Pearl Jam	54
6	152	Van Halen	52
7	51	Queen	45
8	142	The Rolling Stones	41

Total rows: 10 of 10 Query complete 00:00:00.220 Ln 10, Col 1

-- Q. 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

```
WITH popular_genre AS
(
   SELECT COUNT(invoice_line.quantity) AS purchases, customer.country, genre.name,
genre.genre_id,
         ROW_NUMBER() OVER(PARTITION BY customer.country ORDER BY
COUNT(invoice_line.quantity) DESC) AS RowNo
   FROM invoice_line
         JOIN invoice ON invoice.invoice_id = invoice_line.invoice_id
         JOIN customer ON customer.customer_id = invoice.customer_id
         JOIN track ON track.track_id = invoice_line.track_id
         JOIN genre ON genre.genre_id = track.genre_id
         GROUP BY 2,3,4
         ORDER BY 2 ASC, 1 DESC
)
SELECT * FROM popular_genre WHERE RowNo <= 1
```

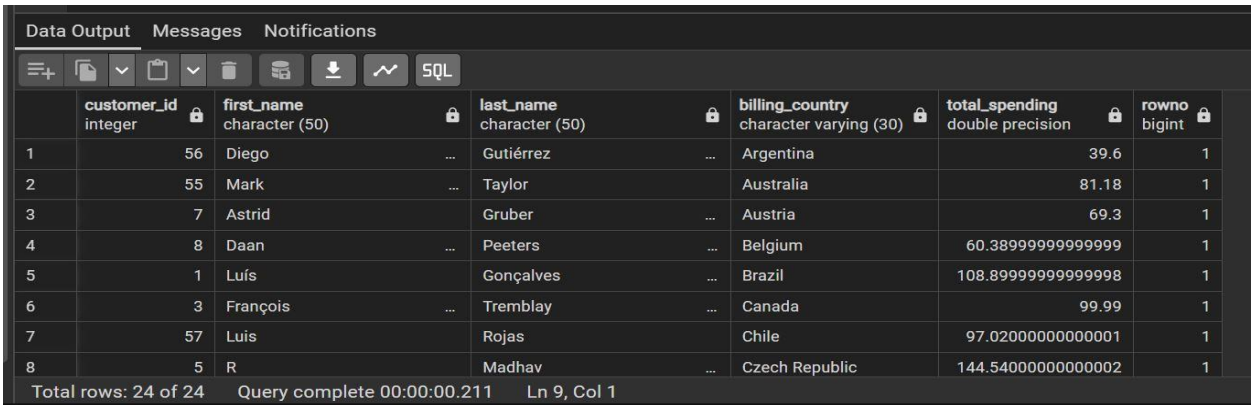
Data Output | Messages | Notifications

	purchases bigint	country character varying (50)	name character varying (120)	genre_id character varying (50)	rowno bigint
1	17	Argentina	Alternative & Punk	4	1
2	34	Australia	Rock	1	1
3	40	Austria	Rock	1	1
4	26	Belgium	Rock	1	1
5	205	Brazil	Rock	1	1
6	333	Canada	Rock	1	1
7	61	Chile	Rock	1	1
8	143	Czech Republic	Rock	1	1

Total rows: 24 of 24 Query complete 00:00:00.170 Ln 14, Col 1

-- Q. 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

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



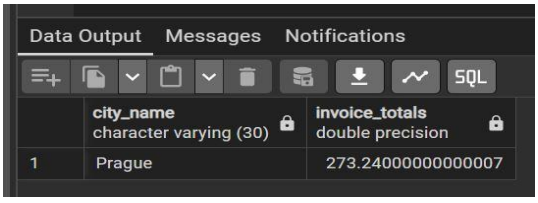
Data Output | Messages | Notifications

	customer_id integer	first_name character (50)	last_name character (50)	billing_country character varying (30)	total_spending double precision	rowno bigint
1	56	Diego	Gutiérrez	Argentina	39.6	1
2	55	Mark	Taylor	Australia	81.18	1
3	7	Astrid	Gruber	Austria	69.3	1
4	8	Daan	Peeters	Belgium	60.38999999999999	1
5	1	Luís	Gonçalves	Brazil	108.89999999999998	1
6	3	François	Tremblay	Canada	99.99	1
7	57	Luis	Rojas	Chile	97.02000000000001	1
8	5	R	Madhav	Czech Republic	144.54000000000002	1

Total rows: 24 of 24 Query complete 00:00:00.211 Ln 9, Col 1

-- Q. 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

```
SELECT billing_city AS city_name, SUM(total) AS invoice_totals
FROM invoice
GROUP BY billing_city
ORDER BY invoice_totals DESC
LIMIT 1;
```



Data Output | Messages | Notifications

	city_name character varying (30)	invoice_totals double precision
1	Prague	273.24000000000007