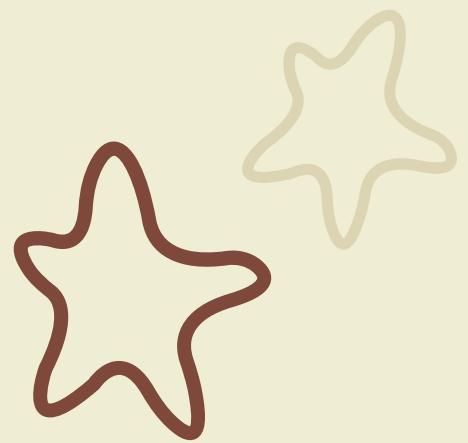


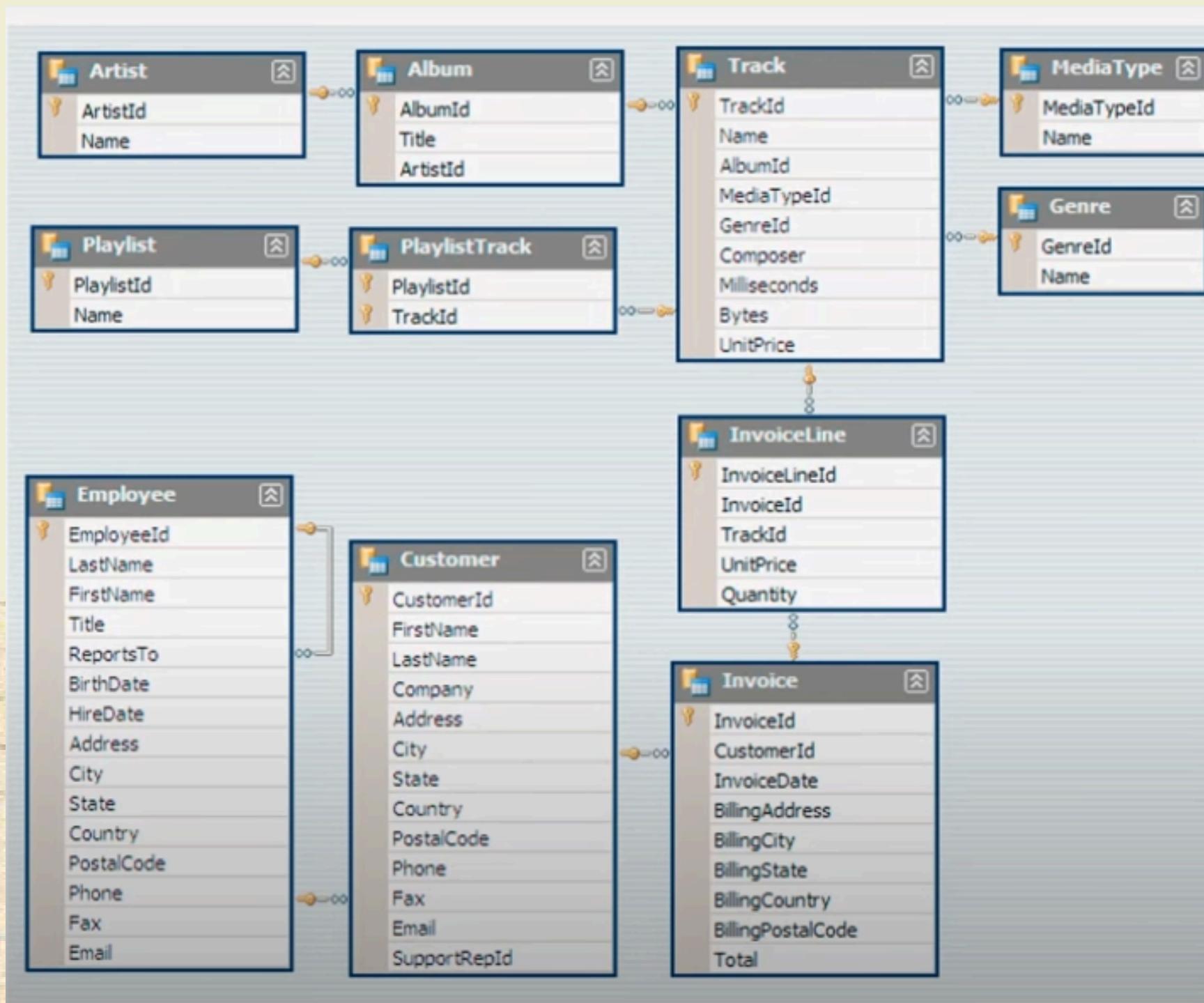
SQL Project



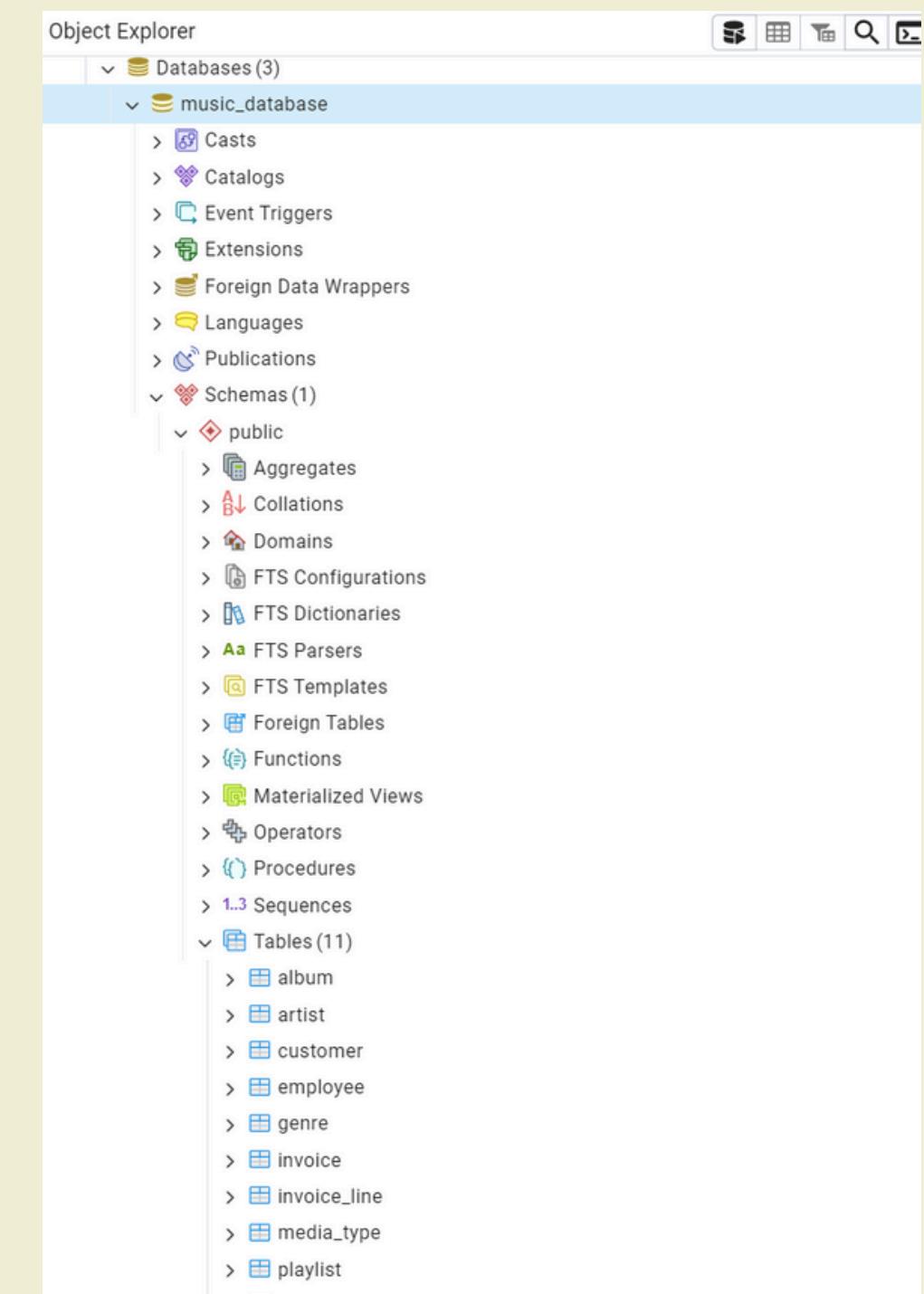
SQL PROJECT: Music Database



Schema Of Music Database



Written Query in pgAdmin4



Easy questions

Query Query History

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

Data Output Messages Notifications

Showing rows: 1 to 1 Page No: 1 of 1

	title character varying (50) 	last_name character (50) 	first_name character (50) 
1	Senior General Manager	Madan	Mohan

Easy questions

Query Query History

```
1
2  /* 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
```

Data Output Messages Notifications

Showing rows: 1 to 24 Page No: 1 of 1

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

Total rows: 24 Query complete 00:00:00.129

Easy questions

Query Query History

```
1  /* Q3: What are top 3 values of total invoice? */
2
3
4  SELECT total
5  FROM invoice
6  ORDER BY total DESC
```

Data Output Messages Notifications

Showing rows: 1 to 614 Page No: 1 of 1

	total double precision
1	23.759999999999998
2	19.8
3	19.8
4	19.8
5	19.8
6	18.81
7	17.82
8	17.82

Total rows: 614 Query complete 00:00:00.132 CRLF Ln 6, Col 20

Easy questions

Query Query History ✖

```
1 /* Q4: Which city has the best customers? We would like to throw a promotional Music
2 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 billing_city, SUM(total) AS InvoiceTotal
7 FROM invoice
8 GROUP BY billing_city
9 ORDER BY InvoiceTotal DESC
10 LIMIT 1;
11
```

Data Output Messages Notifications ✖

Showing rows: 1 to 1 SQL Page No: 1 of 1 ◀ ▶

	billing_city	invoicetotal
1	character varying (30)	double precision
1	Prague	273.24000000000007

Medium questions

Query Query History

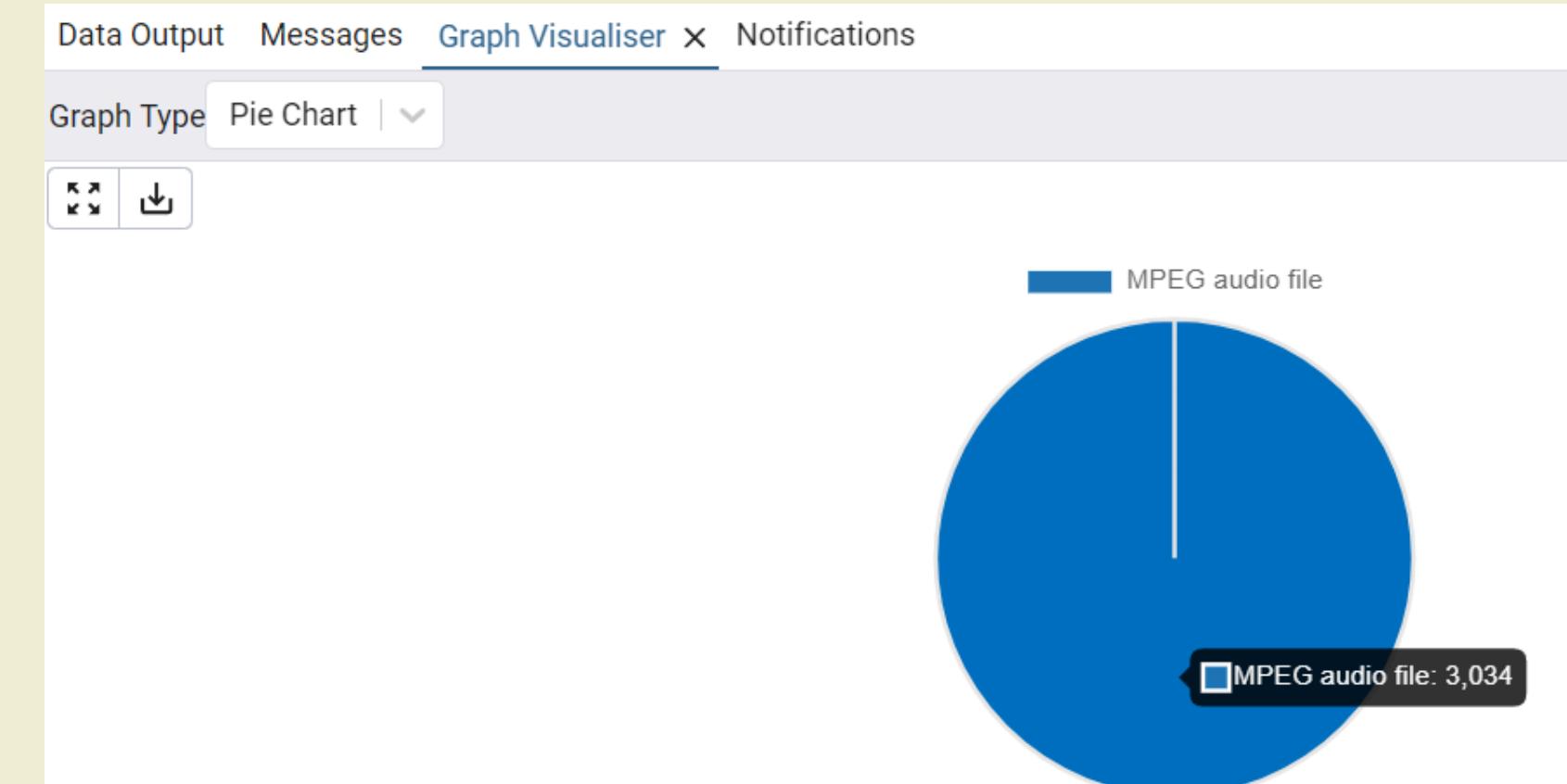
```
1  /* Find the most common media type used in tracks*/
2  SELECT Media_Type.Name, COUNT(Track.Track_Id) AS TotalTracks
3  FROM Track
4  JOIN Media_Type ON Track.Media_Type_Id = Media_Type.Media_Type_Id
5  GROUP BY Media_Type.Name
6  ORDER BY TotalTracks DESC
7  LIMIT 1;
```

Data Output Messages Graph Visualiser Notifications

Showing rows: 1 to 1

	name	totaltracks
1	MPEG audio file	3034

SQL



Medium questions

Query Query History

```
1  /* Find the most popular genre based on purchases */
2  SELECT Genre.Name, COUNT(Invoice_Line.Track_Id) AS TrackPurchases
3  FROM Invoice_Line
4  JOIN Track ON Invoice_Line.Track_Id = Track.Track_Id
5  JOIN Genre ON Track.Genre_Id = Genre.Genre_Id
6  GROUP BY Genre.Name
7  ORDER BY TrackPurchases DESC
8  LIMIT 1;
```

10
11
12

Data Output Messages Graph Visualiser Notifications

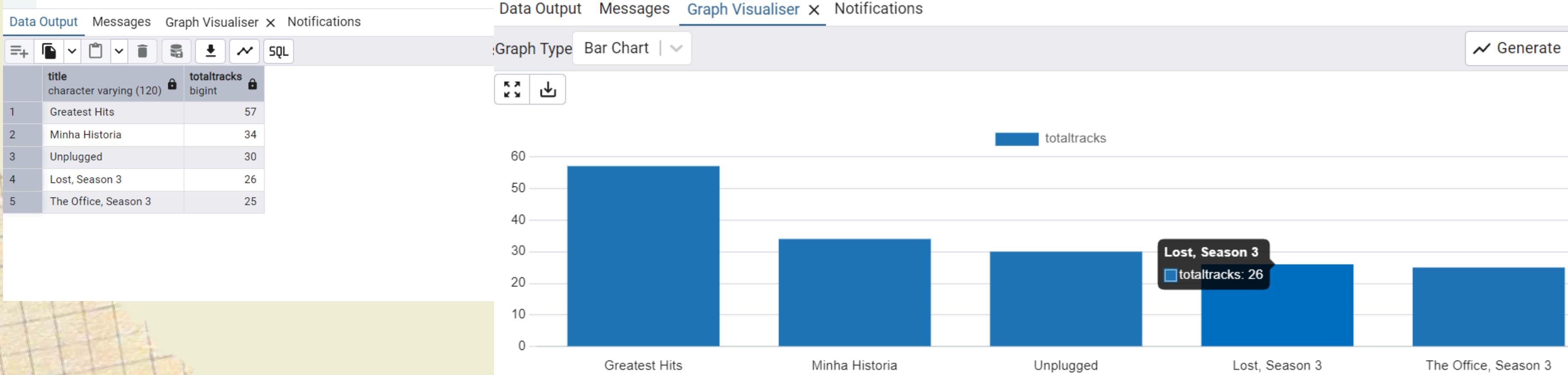
Showing rows: 1 to 1 Page No: 1 of 1

	name	trackpurchases
1	character varying (120)	bigint
1	Rock	2635

Medium Question

Query Query History

```
1 /* Find the top 5 albums with the most tracks*/
2
3 SELECT Album.Title, COUNT(Track.Track_Id) AS TotalTracks
4 FROM Album
5 JOIN Track ON Album.Album_Id = Track.Album_Id
6 GROUP BY Album.Title
7 ORDER BY TotalTracks DESC
8 LIMIT 5;
9
```



Tough questions

Query Query History

```
1 /* Q1: Write query to return the email, first name, last name, & Genre of all Rock Music listeners.  
2 Return your list ordered alphabetically by email starting with A. */  
3  
4  
5  
6 SELECT DISTINCT email,first_name, last_name  
7 FROM customer  
8 JOIN invoice ON customer.customer_id = invoice.customer_id  
9 JOIN invoice_line ON invoice.invoice_id = invoice_line.invoice_id  
10 WHERE track_id IN(  
11     SELECT track_id FROM track  
12     JOIN genre ON track.genre_id = genre.genre_id  
13     WHERE genre.name LIKE 'Rock'  
14 )  
15 ORDER BY email;  
16  
17
```

Data Output Messages Graph Visualiser Notifications

Showing rows: 1 to 59 Page No: 1 of 1

	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
9	dominiquelefebvre@gmail.c...	Dominique	Lefebvre
10	edfrancis@yachoo.ca	Edward	Francis

Tough questions

Query Query History

```

1 /* Q3: Write a query that determines the customer that has spent the most on music for each country.
2 Write a query that returns the country along with the top customer and how much they spent.
3 For countries where the top amount spent is shared, provide all customers who spent this amount. */
4
5 WITH Customer_with_country AS (
6     SELECT customer.customer_id, first_name, last_name, billing_country, SUM(total) AS total_spending,
7         ROW_NUMBER() OVER(PARTITION BY billing_country ORDER BY SUM(total) DESC) AS RowNo
8     FROM invoice
9     JOIN customer ON customer.customer_id = invoice.customer_id
10    GROUP BY 1,2,3,4
11    ORDER BY 4 ASC,5 DESC)
12    SELECT * FROM Customer_with_country WHERE RowNo <= 1
13
14

```

Data Output Messages Graph Visualiser Notifications

SQL

Showing rows: 1 to 24

	customer_id	first_name	last_name	billing_country	total_spending	rowno
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	60.3899999999999	1
5	1	Luís	Gonçalves	Brazil	108.899999999998	1
6	3	François	Tremblay	Canada	99.99	1
7	57	Luis	Rojas	Chile	97.0200000000001	1
8	5	R	Madhav	Czech Republic	144.5400000000002	1
9	9	Kara	Nielsen	Denmark	37.6199999999999	1
10	44	Terhi	Hämäläinen	Finland	79.2	1
11	42	Wyatt	Girard	France	99.99	1
12	37	Fynn	Zimmermann	Germany	94.0500000000001	1
13	45	Ladislav	Kovács	Hungary	78.21	1

