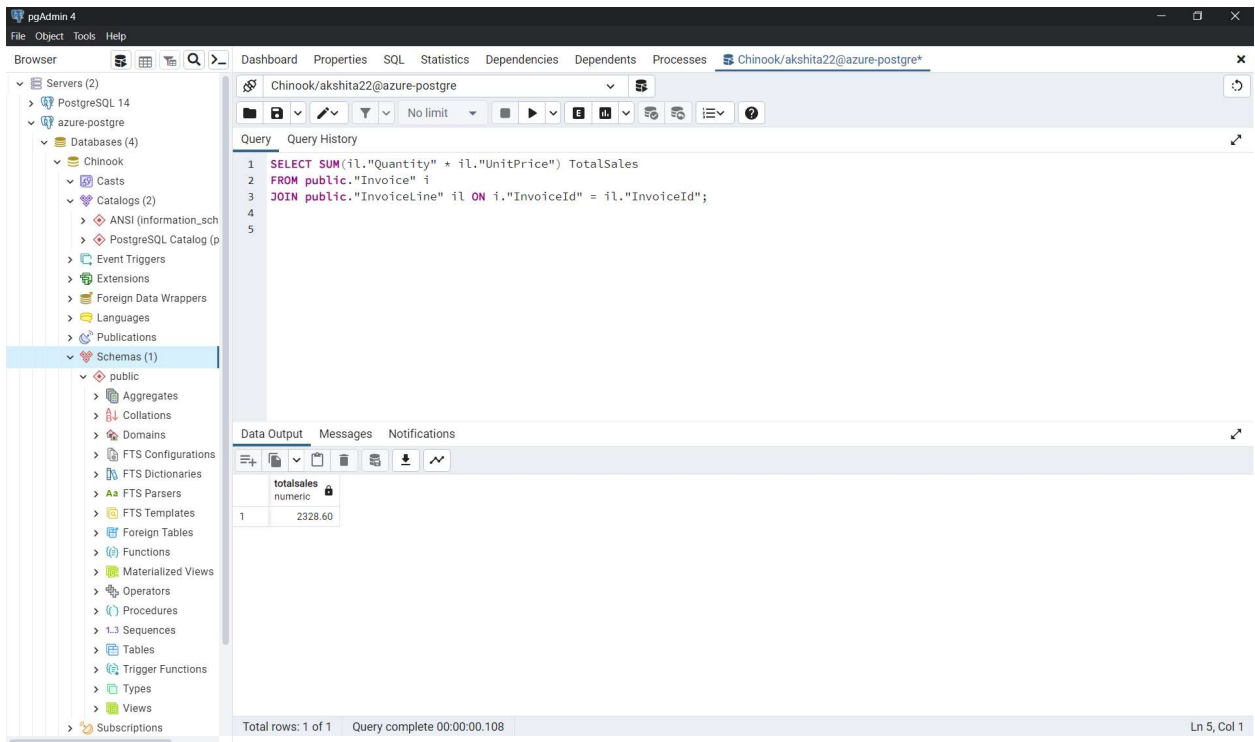


POSTGRE QUERIES

1. Total Sales

```
SELECT SUM(il."Quantity" * il."UnitPrice") TotalSales  
FROM public."Invoice" i  
JOIN public."InvoiceLine" il ON i."InvoiceId" = il."InvoiceId";
```



The screenshot shows the pgAdmin 4 interface. On the left, the 'Servers' tree is expanded to show the 'public' schema under the 'Chinook' database. The main pane displays a SQL query in the 'Query' tab. The query is as follows:

```
1 SELECT SUM(il."Quantity" * il."UnitPrice") TotalSales  
2 FROM public."Invoice" i  
3 JOIN public."InvoiceLine" il ON i."InvoiceId" = il."InvoiceId";  
4  
5
```

Below the query, the 'Data Output' tab shows the results of the query. The results are displayed in a table with the following structure:

totalSales
2328.60

The status bar at the bottom indicates 'Total rows: 1 of 1' and 'Query complete 00:00:00.108'.

2. Total Sales by country- ranked

```
SELECT "BillingCountry" AS Country, SUM("Total") as "TotalSales"
FROM public."Invoice"
GROUP BY "BillingCountry"
ORDER BY "TotalSales" DESC, Country;
```

The screenshot shows the pgAdmin 4 interface. On the left, the 'Servers' tree is expanded to show the 'public' schema under the 'Chinook' database. The main pane displays a SQL query in the 'Query' tab. The 'Data Output' tab shows the results of the query, which are ranked by total sales.

Query:

```
1 SELECT "BillingCountry" AS Country, SUM("Total") as "TotalSales"
2 FROM public."Invoice"
3 GROUP BY "BillingCountry"
4 ORDER BY "TotalSales" DESC, Country;
```

Data Output:

	country	TotalSales
1	USA	523.06
2	Canada	303.96
3	France	195.10
4	Brazil	190.10
5	Germany	156.48
6	United Kingdom	112.86
7	Czech Republic	90.24
8	Portugal	77.24
9	India	75.26
10	Chile	46.62
11	Hungary	45.62
12	Ireland	45.62
13	Austria	42.62
14	Finland	41.62
15	Netherlands	40.62
16	Norway	39.62
17	Sweden	38.62

Total rows: 24 of 24 Query complete 00:00:00.346 Ln 4, Col 37

3. Total Sales by country, state, city

```
SELECT "BillingCountry" AS Country, "BillingState" AS State, "BillingCity" as City, SUM("Total") AS  
TotalSales
```

```
FROM public."Invoice"
```

```
GROUP BY "BillingCountry", "BillingState", "BillingCity"
```

```
ORDER BY TotalSales DESC
```

The screenshot shows the pgAdmin 4 interface. On the left, the 'Servers' tree is expanded to show the 'public' schema under the 'Chinook' database. The main pane displays a SQL query in the 'Query' tab:

```
1 SELECT "BillingCountry" AS Country, "BillingState" AS State, "BillingCity" as City, SUM("Total") AS TotalSales
2 FROM public."Invoice"
3 GROUP BY "BillingCountry", "BillingState", "BillingCity"
4 ORDER BY TotalSales DESC
5
6
7
```

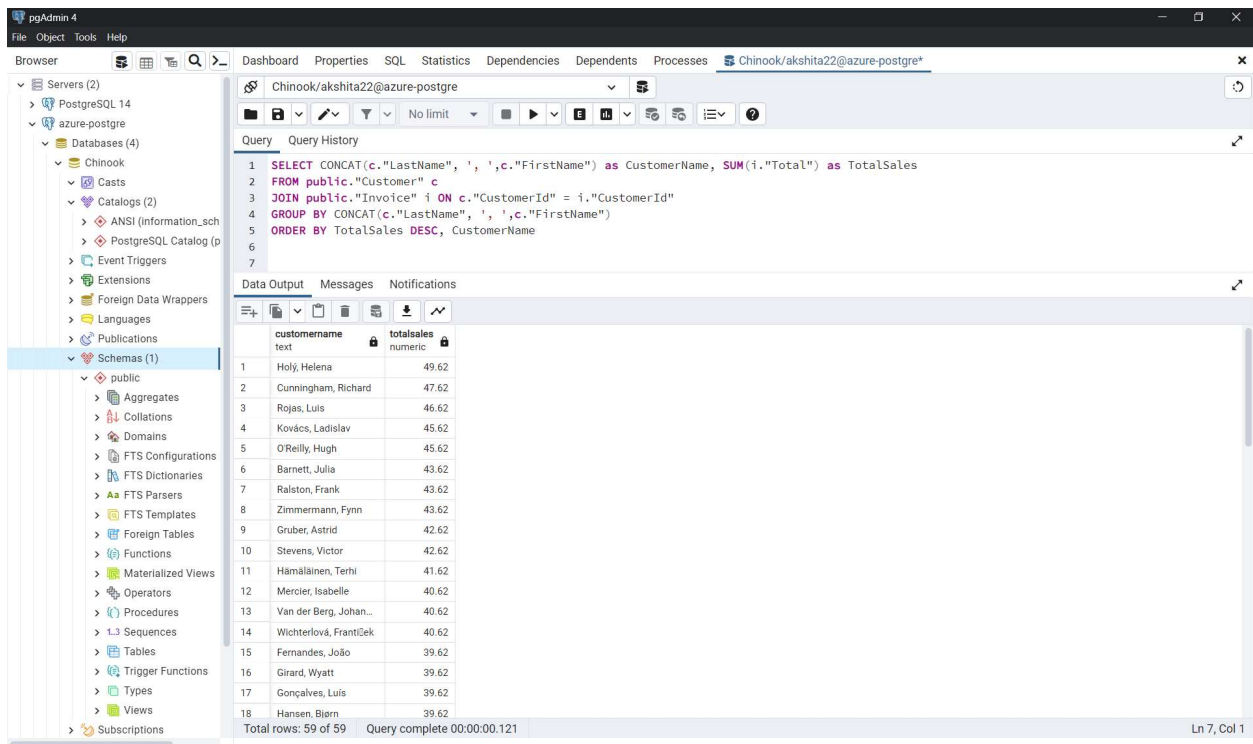
Below the query, the 'Data Output' tab shows the results of the query. The results are displayed in a table with the following columns: country, state, city, and totalsales. The table contains 18 rows of data, sorted by total sales in descending order.

country	state	city	totalsales
Czech Republic	[null]	Prague	90.24
USA	CA	Mountain View	77.24
France	[null]	Paris	77.24
United Kingdom	[null]	London	75.24
Germany	[null]	Berlin	75.24
Brazil	SP	São Paulo	75.24
USA	TX	Fort Worth	47.62
Chile	[null]	Santiago	46.62
Ireland	Dublin	Dublin	45.62
Hungary	[null]	Budapest	45.62
USA	UT	Salt Lake City	43.62
Germany	[null]	Frankfurt	43.62
USA	IL	Chicago	43.62
USA	WI	Madison	42.62
Austria	[null]	Vienne	42.62
Finland	[null]	Helsinki	41.62
France	[null]	Dijon	40.62
Netherlands	VV	Amsterdam	40.62

Total rows: 53 of 53 Query complete 00:00:00.209 Ln 7, Col 1

4. Total sales by customer- ranked

```
SELECT CONCAT(c."LastName", ', ', c."FirstName") as CustomerName, SUM(i."Total") as TotalSales
FROM public."Customer" c
JOIN public."Invoice" i ON c."CustomerId" = i."CustomerId"
GROUP BY CONCAT(c."LastName", ', ', c."FirstName")
ORDER BY TotalSales DESC, CustomerName
```



The screenshot shows the pgAdmin 4 interface. On the left, the 'Servers' tree is expanded to show the 'public' schema. The main pane displays a SQL query in the 'Query' tab, which is the same query as shown in the previous block. Below the query, the 'Data Output' tab shows the results of the query. The results are displayed in a table with two columns: 'customername' and 'totalsales'. The table contains 18 rows of data, sorted by 'totalsales' in descending order. The status bar at the bottom indicates 'Total rows: 59 of 59' and 'Query complete 00:00:00.121'.

	customername	totalsales
1	Holji, Helena	49.62
2	Cunningham, Richard	47.62
3	Rojas, Luis	46.62
4	Kovács, Ladislav	45.62
5	O'Reilly, Hugh	45.62
6	Barnett, Julia	43.62
7	Ralston, Frank	43.62
8	Zimmermann, Fynn	43.62
9	Gruber, Astrid	42.62
10	Stevens, Victor	42.62
11	Hämäläinen, Terhi	41.62
12	Mercier, Isabelle	40.62
13	Van der Berg, Johan...	40.62
14	Wichterlová, František	40.62
15	Fernandes, João	39.62
16	Girard, Wyatt	39.62
17	Gonçalves, Luis	39.62
18	Hansen, Bjørn	39.62

5. Total sales by artist- ranked

```
SELECT a."Name" as ArtistName, SUM(i."UnitPrice" * i."Quantity") as TotalSales
FROM public."Artist" a
JOIN public."Album" al ON a."ArtistId" = al."ArtistId"
JOIN public."Track" tr on tr."AlbumId" = al."AlbumId"
JOIN public."InvoiceLine" i ON i."TrackId" = tr."TrackId"
GROUP BY a."Name"
ORDER BY TotalSales DESC
```

The screenshot shows the pgAdmin 4 interface. On the left, the 'Servers' tree is expanded to show the 'public' schema. The main pane displays a SQL query in the 'Query' tab, which is the same query as shown in the previous block. Below the query, the 'Data Output' tab shows the results of the query. The results are displayed in a table with two columns: 'artistname' and 'totalsales'. The table contains 17 rows of data, sorted by 'totalsales' in descending order. The status bar at the bottom indicates 'Total rows: 165 of 165' and 'Query complete 00:00:00.226'.

artistname	totalsales
Iron Maiden	138.60
U2	105.93
Metallica	90.09
Led Zeppelin	86.13
Lost	81.59
The Office	49.75
Os Paralamas Do Sucesso	44.55
Deep Purple	43.56
Faith No More	41.58
Eric Clapton	39.60
R.E.M.	38.61
Creedence Clearwater Revival	36.63
Queen	36.63
Battlestar Galactica (Classic)	35.82
Guns N' Roses	35.64
Titãs	33.66
Green Day	32.67

6. Total sales by albums

SELECT al."Title" , SUM (i."UnitPrice" * i."Quantity") as TotalSales

FROM public."Album" al

JOIN public."Track" tr on tr."AlbumId" = al."AlbumId"

JOIN public."InvoiceLine" i ON i."TrackId" = tr."TrackId"

GROUP BY al."Title"

ORDER BY TotalSales DESC, al."Title"

The screenshot shows the pgAdmin 4 interface. On the left, the 'Servers' tree is expanded to show the 'public' schema under the 'Chinook' database. The main pane displays a SQL query in the 'Query' tab. The query is as follows:

```
1 SELECT al."Title" , SUM (i."UnitPrice" * i."Quantity") as TotalSales
2 FROM public."Album" al
3 JOIN public."Track" tr on tr."AlbumId" = al."AlbumId"
4 JOIN public."InvoiceLine" i ON i."TrackId" = tr."TrackId"
5 GROUP BY al."Title"
6 ORDER BY TotalSales DESC, al."Title"
7
```

Below the query, the 'Data Output' tab shows the results of the query. The results are displayed in a table with two columns: 'Title' (character varying (160)) and 'totalsales' (numeric). The table contains 17 rows of data, sorted by total sales in descending order.

Title	totalsales
Battlestar Galactica (Classic), Season 1	35.82
The Office, Season 3	31.84
Minha Historia	26.73
Heroes, Season 1	25.87
Lost, Season 2	25.87
Greatest Hits	25.74
Unplugged	24.75
Battlestar Galactica, Season 3	23.88
Lost, Season 3	21.89
Acústico	21.78
Lost, Season 1	19.90
Greatest Kiss	19.80
Chronicle, Vol. 2	18.81
My Generation - The Very Best Of The Who	18.81
Prenda Minha	18.81
Acústico MTV	17.82
Chronicle, Vol. 1	17.82

Total rows: 304 of 304 Query complete 00:00:00.220 Ln 7, Col 1

7. Total sales by salesperson

```
SELECT CONCAT(e."LastName", ', ', e."FirstName") as EmployeeName, SUM(il."UnitPrice" * il."Quantity")  
as TotalSales
```

```
FROM public."Employee" e
```

```
JOIN public."Customer" c ON c."SupportRepId" = e."EmployeeId"
```

```
JOIN public."Invoice" i on i."CustomerId" = c."CustomerId"
```

```
JOIN public."InvoiceLine" il on il."InvoiceId" = i."InvoiceId"
```

```
GROUP BY CONCAT(e."LastName", ', ', e."FirstName")
```

```
ORDER BY TotalSales DESC
```

The screenshot shows the pgAdmin 4 interface. On the left, the 'Servers' tree is expanded to show the 'public' schema under the 'Chinook' database. The main pane displays a SQL query in the 'Query' tab. The query is as follows:

```
2 SELECT CONCAT(e."LastName", ', ', e."FirstName") as EmployeeName, SUM(il."UnitPrice" * il."Quantity") as TotalSales
3 FROM public."Employee" e
4 JOIN public."Customer" c ON c."SupportRepId" = e."EmployeeId"
5 JOIN public."Invoice" i on i."CustomerId" = c."CustomerId"
6 JOIN public."InvoiceLine" il on il."InvoiceId" = i."InvoiceId"
7 GROUP BY CONCAT(e."LastName", ', ', e."FirstName")
8 ORDER BY TotalSales DESC
9
```

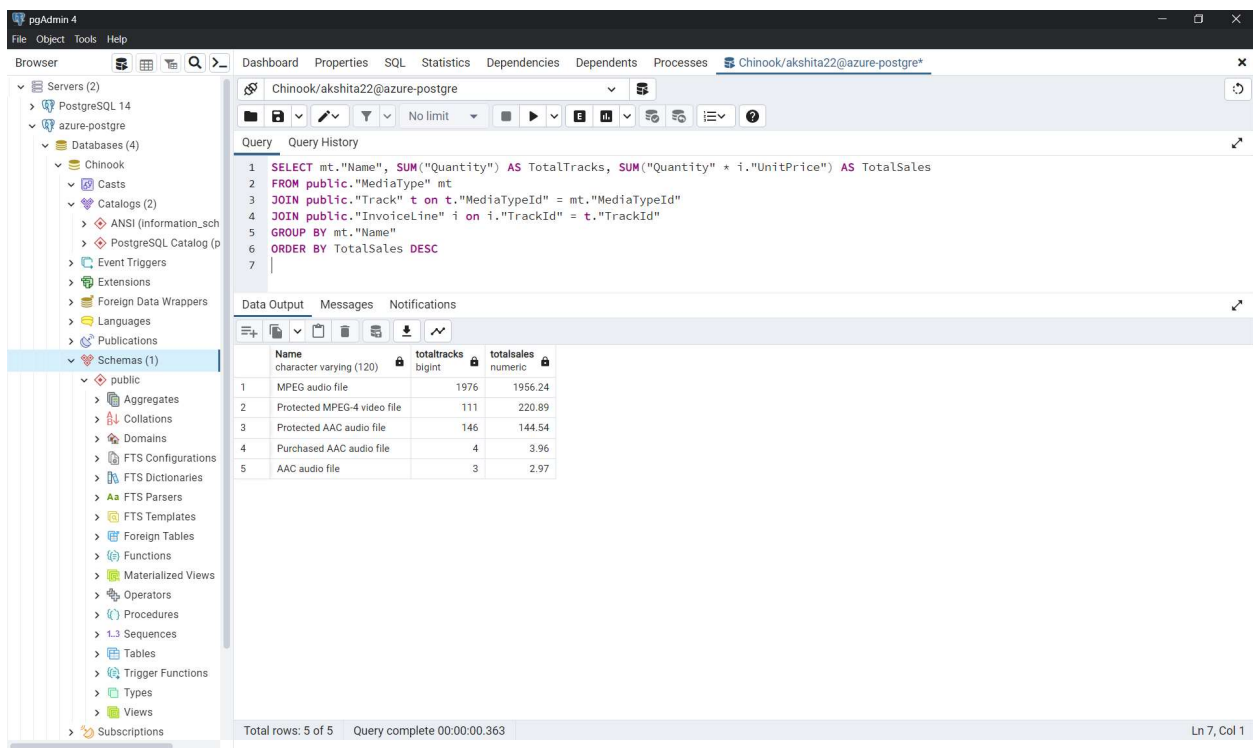
Below the query, the 'Data Output' tab shows the results of the query. The results are displayed in a table with two columns: 'employeeName' and 'totalsales'. The data is as follows:

employeeName	totalsales
Peacock, Jane	833.04
Park, Margaret	775.40
Johnson, Steve	720.16

The status bar at the bottom indicates 'Total rows: 3 of 3' and 'Query complete 00:00:00.127'. The bottom right corner shows 'Ln 5, Col 46'.

8. Total tracks bought and total revenues

```
SELECT mt."Name", SUM("Quantity") AS TotalTracks, SUM("Quantity" * i."UnitPrice") AS TotalSales
FROM public."MediaType" mt
JOIN public."Track" t on t."MediaTypeId" = mt."MediaTypeId"
JOIN public."InvoiceLine" i on i."TrackId" = t."TrackId"
GROUP BY mt."Name"
ORDER BY TotalSales DESC
```



The screenshot shows the pgAdmin 4 interface. On the left, the 'Servers' tree is expanded to show the 'public' schema. The main pane displays a SQL query in the 'Query' tab. The query is as follows:

```
1 SELECT mt."Name", SUM("Quantity") AS TotalTracks, SUM("Quantity" * i."UnitPrice") AS TotalSales
2 FROM public."MediaType" mt
3 JOIN public."Track" t on t."MediaTypeId" = mt."MediaTypeId"
4 JOIN public."InvoiceLine" i on i."TrackId" = t."TrackId"
5 GROUP BY mt."Name"
6 ORDER BY TotalSales DESC
7
```

Below the query, the 'Data Output' tab shows the results of the query. The results are displayed in a table with the following columns: Name, totaltracks, and totalsales. The data is as follows:

Name	totaltracks	totalsales
MPEG audio file	1976	1956.24
Protected MPEG-4 video file	111	220.89
Protected AAC audio file	146	144.54
Purchased AAC audio file	4	3.96
AAC audio file	3	2.97

At the bottom of the interface, the status bar indicates 'Total rows: 5 of 5' and 'Query complete 00:00:00.363'.

9. Total Sales by Customer

```
SELECT CONCAT(c."LastName", ', ', c."FirstName") as CustomerName, SUM("Quantity"*"UnitPrice") AS  
TotalSales
```

```
FROM public."Invoice" i
```

```
JOIN public."Customer" c on i."CustomerId"=c."CustomerId"
```

```
JOIN public."InvoiceLine" il ON i."InvoiceId" = il."InvoiceId"
```

```
GROUP BY CONCAT(c."LastName", ', ', c."FirstName")
```

```
ORDER BY TotalSales DESC, CustomerName;
```

The screenshot shows the pgAdmin 4 interface. On the left, the 'Servers' tree is expanded to show the 'public' schema. The main pane displays a SQL query and its results.

Query:

```
1 SELECT CONCAT(c."LastName", ', ', c."FirstName") as CustomerName, SUM("Quantity"*"UnitPrice") AS  
2 FROM public."Invoice" i  
3 JOIN public."Customer" c on i."CustomerId"=c."CustomerId"  
4 JOIN public."InvoiceLine" il ON i."InvoiceId" = il."InvoiceId"  
5 GROUP BY CONCAT(c."LastName", ', ', c."FirstName")  
6 ORDER BY TotalSales DESC, CustomerName;  
7
```

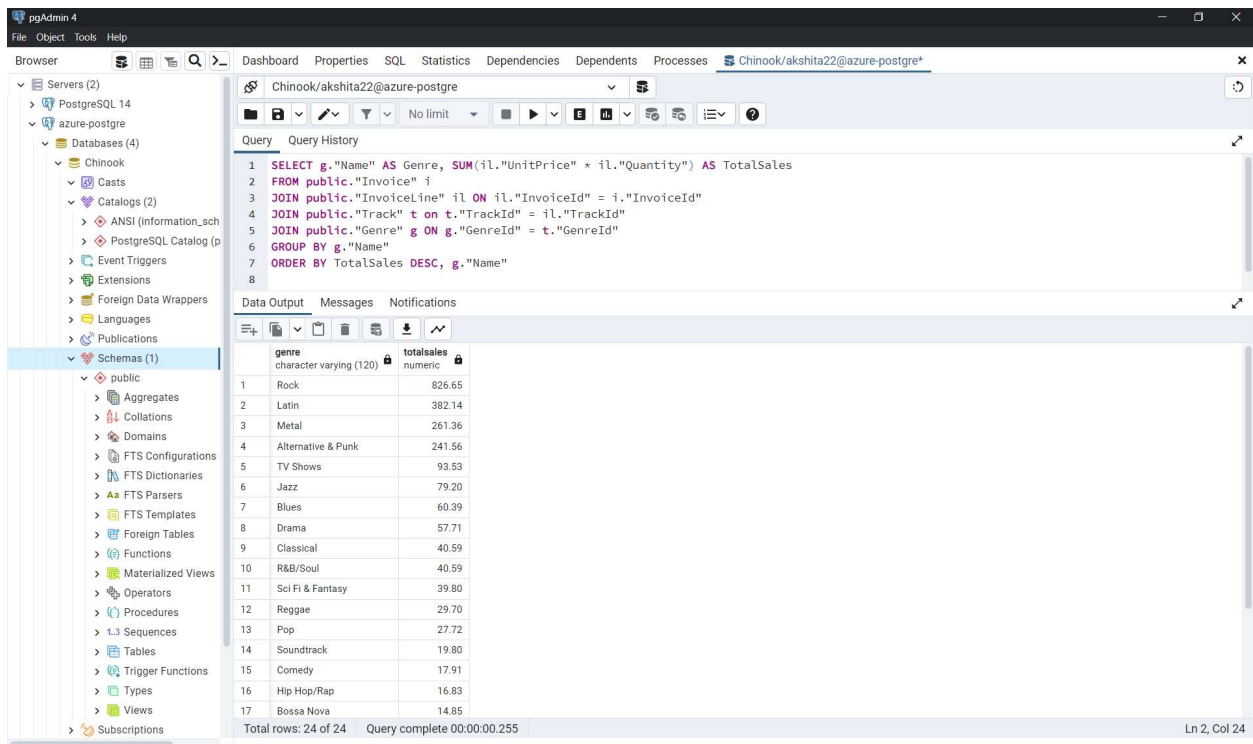
Data Output:

customername	totalsales
Holý, Helena	49.62
Cunningham, Richard	47.62
Rojas, Luis	46.62
Kovács, Ladislav	45.62
O'Reilly, Hugh	45.62
Barnett, Julia	43.62
Ralston, Frank	43.62
Zimmermann, Fynn	43.62
Gruber, Astrid	42.62
Stevens, Victor	42.62
Hämäläinen, Terhi	41.62
Mercier, Isabelle	40.62
Van der Berg, Johan...	40.62
Wichterlová, František	40.62
Fernandes, João	39.62
Girard, Wyatt	39.62
Gonçalves, Luis	39.62

Total rows: 59 of 59 Query complete 00:00:00.138 Ln 7, Col 1

10. Total sales by genre

```
SELECT g."Name" AS Genre, SUM(il."UnitPrice" * il."Quantity") AS TotalSales
FROM public."Invoice" i
JOIN public."InvoiceLine" il ON il."InvoiceId" = i."InvoiceId"
JOIN public."Track" t on t."TrackId" = il."TrackId"
JOIN public."Genre" g ON g."GenreId" = t."GenreId"
GROUP BY g."Name"
ORDER BY TotalSales DESC, g."Name"
```



The screenshot shows the pgAdmin 4 interface. On the left, the 'Servers' tree is expanded to show the 'public' schema. The main pane displays a SQL query in the 'Query' tab. The query is a SELECT statement that calculates total sales by genre. The 'Data Output' tab shows the results of the query, which are sorted by total sales in descending order. The results are displayed in a table with two columns: 'genre' and 'totalsales'.

genre	totalsales
Rock	826.65
Latin	382.14
Metal	261.36
Alternative & Punk	241.56
TV Shows	93.53
Jazz	79.20
Blues	60.39
Drama	57.71
Classical	40.59
R&B/Soul	40.59
Sci Fi & Fantasy	39.80
Reggae	29.70
Pop	27.72
Soundtrack	19.80
Comedy	17.91
Hip Hop/Rap	16.83
Bossa Nova	14.85

Total rows: 24 of 24 Query complete 00:00:00.255 Ln 2, Col 24