

SQL PROJECT- MUSIC STORE DATA ANALYSIS

Question Set 1 - Easy

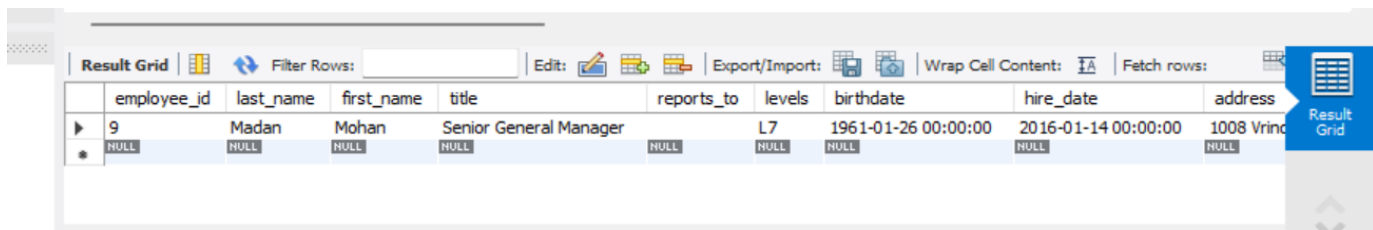
use music_database;

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

select *

from employee e

order by levels desc limit 1 ;



The screenshot shows a SQL query result grid with the following data:

	employee_id	last_name	first_name	title	reports_to	levels	birthdate	hire_date	address
▶	9	Madan	Mohan	Senior General Manager		L7	1961-01-26 00:00:00	2016-01-14 00:00:00	1008 Vrindavan
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

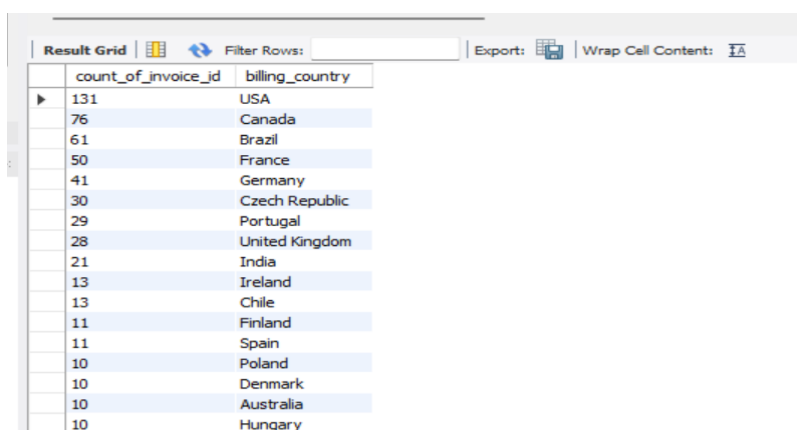
-- 2. Which countries have the most Invoices?

select count(invoice_id) as count_of_invoice_id, billing_country

from invoice

group by billing_country

order by count_of_invoice_id desc;

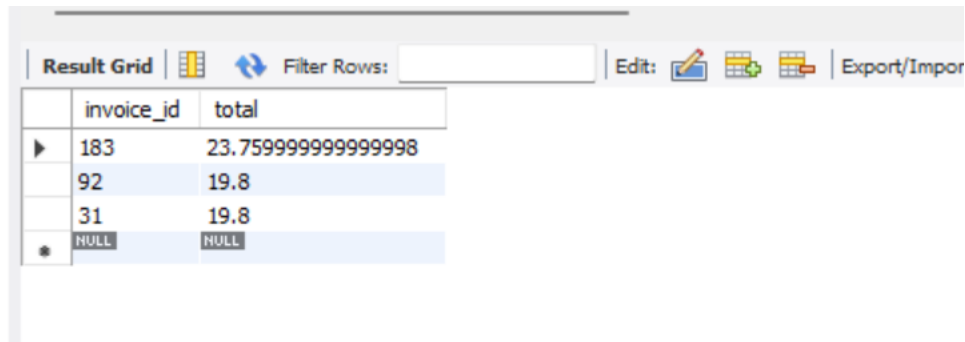


The screenshot shows a SQL query result grid with the following data:

	count_of_invoice_id	billing_country
▶	131	USA
	76	Canada
	61	Brazil
	50	France
	41	Germany
	30	Czech Republic
	29	Portugal
	28	United Kingdom
	21	India
	13	Ireland
	13	Chile
	11	Finland
	11	Spain
	10	Poland
	10	Denmark
	10	Australia
	10	Hungary

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

```
select invoice_id,total
from invoice
order by total desc limit 3;
```

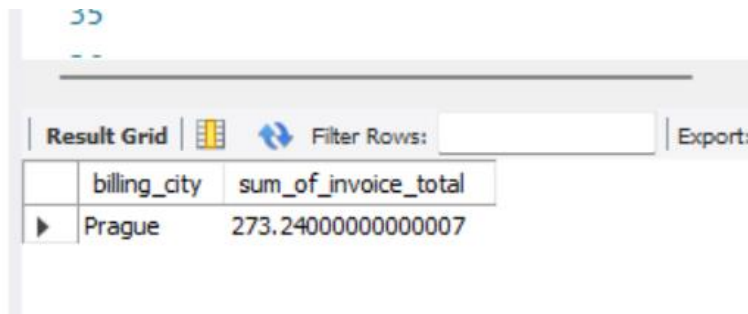


The screenshot shows a database interface with a 'Result Grid' tab. The grid displays the results of a query. The columns are 'invoice_id' and 'total'. The data is as follows:

invoice_id	total
183	23.759999999999998
92	19.8
31	19.8
NULL	NULL

-- 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 .

```
select billing_city, sum(total) as sum_of_invoice_total
from invoice
group by billing_city
order by sum_of_invoice_total desc limit 1;
```

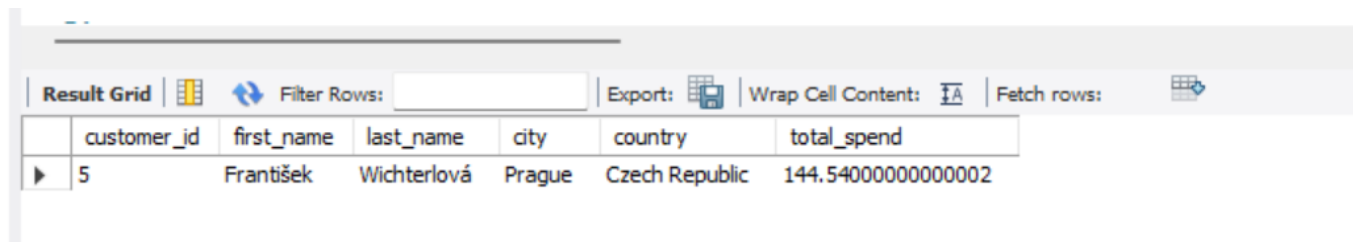


The screenshot shows a database interface with a 'Result Grid' tab. The grid displays the results of a query. The columns are 'billing_city' and 'sum_of_invoice_total'. The data is as follows:

billing_city	sum_of_invoice_total
Prague	273.24000000000007

-- 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

```
select c.customer_id,c.first_name,c.last_name,c.city,  
c.country,sum(i.total) as total_spend  
from invoice i  
join customers c  
on c.customer_id=i.customer_id  
group by c.customer_id  
order by total_spend desc limit 1;
```



The screenshot shows a database interface with a toolbar at the top containing options like 'Result Grid', 'Filter Rows', 'Export', 'Wrap Cell Content', and 'Fetch rows'. Below the toolbar is a table with the following data:

	customer_id	first_name	last_name	city	country	total_spend
▶	5	František	Wichterlová	Prague	Czech Republic	144.54000000000002

-- Question Set 2 – Moderate

-- 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

```
select distinct c.email, c.first_name ,c.last_name,g.name AS genre_name  
from customers c  
join invoice i on c.customer_id= i.customer_id  
join invoice_line il on il.invoice_id=i.invoice_id  
join track t on il.track_id=t.track_id  
JOIN genre g ON t.genre_id = g.genre_id  
where g.name = 'Rock'
```

order by c.email ASC;

The screenshot shows a data visualization tool interface. At the top, there's a 'Result Grid' tab with a 'Filter Rows' input and 'Export' and 'Wrap Cell Content' buttons. Below this is a table with 5 columns: email, first_name, last_name, and genre_name. The table contains 13 rows of data, all with 'Rock' as the genre. Below the table is a 'Result 8' tab. At the bottom, there's an 'Output' section with a dropdown menu set to 'Action Output'. Below this is a log table with 5 columns: #, Time, Action, and Message. It shows two successful actions (green checkmarks) at 13:06:37 and 13:07:13, both executing a SQL query that returns 59 rows.

	email	first_name	last_name	genre_name
▶	aaronmitchell@yahoo.ca	Aaron	Mitchell	Rock
	alero@uol.com.br	Alexandre	Rocha	Rock
	astrid.gruber@apple.at	Astrid	Gruber	Rock
	bjorn.hansen@yahoo.no	Bjørn	Hansen	Rock
	camille.bernard@yahoo.fr	Camille	Bernard	Rock
	daan.peeters@apple.be	Daan	Peeters	Rock
	diego.gutierrez@yahoo.ar	Diego	Gutiérrez	Rock
	dmiller@comcast.com	Dan	Miller	Rock
	dominiquedefebvre@gmail.com	Dominique	Lefebvre	Rock
	edfrancis@yahoo.ca	Edward	Francis	Rock
	eduardo@woodstock.com.br	Eduardo	Martins	Rock
	ellie.sullivan@shaw.ca	Ellie	Sullivan	Rock

#	Time	Action	Message
✓	11 13:06:37	select distinct c.email, c.first_name ,c.last_name,g.name AS genre_name from c...	59 row(s) returned
✓	12 13:07:13	select distinct c.email, c.first_name ,c.last_name,g.name AS genre_name from c...	59 row(s) returned

-- 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

```
select a.name as artist_name,count(t.track_id) as total_track_id
from artist a
join album ab on a.artist_id=ab.artist_id
join track t on t.album_id=ab.album_id
join genre g on t.genre_id= g.genre_id
where g.name='Rock'
group by a.name
order by total_track_id desc limit 10;
```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

Fetch rows:

	artist_name	total_track_id
▶	Led Zeppelin	114
	U2	112
	Deep Purple	92
	Iron Maiden	81
	Pearl Jam	54
	Van Halen	52
	Queen	45
	The Rolling Stones	41
	Creedence Clearwater Revival	40
	Kiss	35

Result 9

×

Output

Action Output

#	Time	Action	Message
✓ 12	13:07:13	select distinct c.email, c.first_name ,c.last_name,g.name AS genre_name from c...	59 row(s) returned
✓ 13	13:08:21	select a.name as artist_name,count(t.track_id) as total_track_id from artist a join al...	10 row(s) returned

-- Q.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

-- 393733.3383

select name,milliseconds

from track

where milliseconds >(select avg(milliseconds) from track)

order by milliseconds desc;

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	name	milliseconds
▶	Occupation / Precipice	5286953
	Through a Looking Glass	5088838
	Greetings from Earth, Pt. 1	2960293
	The Man With Nine Lives	2956998
	Battlestar Galactica, Pt. 2	2956081

track 10

×

Output

Action Output

#	Time	Action	Message
✓ 13	13:08:21	select a.name as artist_name,count(t.track_id) as total_track_id from artist a join al...	10 row(s) returned
✓ 14	13:09:51	select name,milliseconds from track where milliseconds >(select avg(milliseconds) fr...	492 row(s) returned

