# SET-1

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

Ans=

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| employee\_id | first\_name | last\_name | levels | hire\_date |
| 9 | Mohan | Madan | L7 | 1/14/2016 0:00 |

select employee\_id,first\_name,last\_name,levels,hire\_date

from employee

order by hire\_date asc

limit 1;

1. Q= Which countries have the most Invoices?

Ans=

|  |  |
| --- | --- |
| billing\_country | count |
| USA | 131 |

select billing\_country,count(invoice\_id)

from invoice

group by billing\_country

order by count desc

limit 1

1. Q=What are top 3 values of total invoice?

Ans=

|  |  |
| --- | --- |
| invoice\_id | total |
| 183 | 23.76 |
| 92 | 19.8 |
| 31 | 19.8 |

select invoice\_id,total

from invoice

order by total desc

limit 3

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

Ans=

|  |  |
| --- | --- |
| City | sum |
| Prague | 273.24 |

select billing\_city as city ,sum( total )

from invoice

group by city

order by sum desc

limit 1

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.

Ans=

|  |  |  |
| --- | --- | --- |
| first\_name | last\_name | spend |
| R | Madhav | 144.54 |

select c.first\_name,c.last\_name,sum(total) as spend

from customer c

join invoice i on c.customer\_id=i.customer\_id

group by 1,2

order by spend desc

limit 1

# Set-2

1. 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.

Ans=

select c.first\_name,c.last\_name,c.email,g.name

from customer 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'

group by 1,2,3,4

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.

Ans=

|  |  |  |
| --- | --- | --- |
| Name | count | name-2 |
| Led Zeppelin | 114 | Rock |
| U2 | 112 | Rock |
| Deep Purple | 92 | Rock |
| Iron Maiden | 81 | Rock |
| Pearl Jam | 54 | Rock |
| Van Halen | 52 | Rock |
| Queen | 45 | Rock |
| The Rolling Stones | 41 | Rock |
| Creedence Clearwater Revival | 40 | Rock |
| Kiss | 35 | Rock |

select a.name, count( a.artist\_id),g.name

from artist a

join album al on a.artist\_id=al.artist\_id

join track t on t.album\_id=al.album\_id

join genre g on g.genre\_id=t.genre\_id

where g.name='Rock'

group by 1,3

order by count desc

limit 10

1. 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.

Ans= 494 records

select name,milliseconds

from track

where milliseconds>(select avg(milliseconds)

from track

)

order by milliseconds desc;

# Set-3

1. Q= Find how much amount spent by each customer on most earned artists? Write a query to return customer name, artist name and total spent

Ans=43 records

select c.first\_name,c.last\_name,ar.name,sum(il.unit\_price\*il.quantity) as earned

from customer 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 t.track\_id=il.track\_id

join album a on a.album\_id=t.album\_id

join artist ar on ar.artist\_id=a.artist\_id

join genre g on t.genre\_id=g.genre\_id

where ar.name=( with ab as (

select ar.name,sum(il.unit\_price\*il.quantity) as earned

from customer 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 t.track\_id=il.track\_id

join album a on a.album\_id=t.album\_id

join artist ar on ar.artist\_id=a.artist\_id

join genre g on t.genre\_id=g.genre\_id

group by 1

order by earned desc

limit 1)

select name from ab)

group by 1,2,3

order by earned desc

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.

Ans= 24 rows

WITH SS AS (

with ab as (

select c.country,count(il.quantity),g.name

from invoice\_line il

join invoice i on i.invoice\_id=il.invoice\_id

join customer c on c.customer\_id=i.customer\_id

join track t on t.track\_id=il.track\_id

join genre g on g.genre\_id=t.genre\_id

group by 1,3

order by count desc)

select\*,

row\_number() over(partition by country order by count DESC ) AS R

from ab)

select\* from ss

where r=1

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.

Ans= 24 row

with ss as (

with ab as(

select c.country,c.first\_name,c.last\_name,sum(i.total)

from customer c

join invoice i on c.customer\_id=i.customer\_id

group by 1,2,3

order by sum desc)

select\*,

row\_number()over (partition by country order by sum DESC )as total

from ab)

select\* from ss

where total=1