```sql
/*  Question Set 1 - Easy */

/* Q1: Who is the senior most employee based on job title? */

SELECT title, last_name, first_name
FROM employee
ORDER BY levels DESC
LIMIT 1


/* Q2: Which countries have the most Invoices? */

SELECT COUNT(*) AS c, billing_country
FROM invoice
GROUP BY billing_country
ORDER BY c DESC


/* Q3: What are top 3 values of total invoice? */

SELECT total
FROM invoice
ORDER BY total DESC


/* Q4: 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 InvoiceTotal
FROM invoice
GROUP BY billing_city
ORDER BY InvoiceTotal DESC
LIMIT 1;


/* Q5: 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, first_name, last_name, SUM(total) AS
  total_spending
FROM customer
JOIN invoice ON customer.customer_id = invoice.customer_id
GROUP BY customer.customer_id
ORDER BY total_spending DESC
LIMIT 1;
```

```sql
/* Question Set 2 - Moderate */

/* Q1: 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. */

/*Method 1 */

SELECT DISTINCT email,first_name, last_name
FROM customer
JOIN invoice ON customer.customer_id = invoice.customer_id
JOIN invoiceline ON invoice.invoice_id = invoiceline.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;


/* Method 2 */

SELECT DISTINCT email AS Email,first_name AS FirstName, last_name AS LastName,
  genre.name AS Name
FROM customer
JOIN invoice ON invoice.customer_id = customer.customer_id
JOIN invoiceline ON invoiceline.invoice_id = invoice.invoice_id
JOIN track ON track.track_id = invoiceline.track_id
JOIN genre ON genre.genre_id = track.genre_id
WHERE genre.name LIKE 'Rock'
ORDER BY email;


/* Q2: 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;


/* Q3: 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. */
```

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

/* Thank You :) */
```