SQL Quiz 2 Solutions

1. Write SQL query that provides the following details: actor's first and last name combined as full_name, film title, film description and length of the movie. How many rows are there in the table?

    -
      ```
      SELECT CONCAT(a.first_name,' ',a.last_name) as full_name,
      f.title, f.description, f.length
      FROM actor a
      JOIN film_actor fa ON a.actor_id=fa.actor_id
      JOIN film f ON f.film_id=fa.film_id;
      ```

2. Write a query that creates a list of actors and movies where the movie length was more than 60 minutes.

    -
      ```
      SELECT CONCAT(a.first_name,' ',a.last_name) as actor_name,
      f.title movie_name
      FROM actor a
      JOIN film_actor fa ON a.actor_id=fa.actor_id
      JOIN film f ON f.film_id=fa.film_id
      WHERE f.length>60;
      ```

3. Write a query that captures the actor id, full name of the actor, and counts the number of movies each actor has made. (HINT: Think about whether you should group by actor id or the full name of the actor.) Identify the actor who has made the maximum number of movies.

    -
      ```
      SELECT a.actor_id, CONCAT(a.first_name,' ',a.last_name) as
      actor_name,
      COUNT(*) movie_count
      FROM actor a
      JOIN film_actor fa ON a.actor_id=fa.actor_id
      JOIN film f ON f.film_id=fa.film_id
      GROUP BY 1,2
      ORDER BY COUNT(*)DESC;
      ```
    - **Gina Degeneres made maximum number of movies**

4. Write a query that displays a table with 4 columns: actor's full name, film title, length of movie, and a column name "filmlen_groups" that

classifies movies based on their length. Filmlen_groups should include 4 categories: 1 hour or less, Between 1-2 hours, Between 2-3 hours, More than 3 hours.

```
SELECT CONCAT(a.first_name,' ',a.last_name) as actor_name,

f.title, f.length,

CASE

        WHEN f.length<60 THEN 'Group 1'

   WHEN f.length>60 and f.length<120 THEN 'Group 2'

   WHEN f.length>120 and f.length<180 THEN 'Group 3'

   WHEN f.length>180 THEN 'Group 4'

END as filmlen_groups

FROM actor a

JOIN film_actor fa ON a.actor_id=fa.actor_id

JOIN film f ON f.film_id=fa.film_id;
```

5. Write a query to create a count of movies in each of the 4 filmlen_groups: 1 hour or less, Between 1-2 hours, Between 2-3 hours, More than 3 hours.

filmlen_groups	filmcount_bylencat
1 hour or less	104
Between 1-2 hours	439
Between 2-3 hours	418
More than 3 hours	39

```
SELECT DISTINCT(filmlen_groups),
    COUNT(title) OVER (PARTITION BY filmlen_groups) AS filmcount_bylencat

FROM

   (SELECT title,length,

    CASE WHEN length <= 60 THEN '1 hour or less'

    WHEN length > 60 AND length <= 120 THEN 'Between 1-2 hours'

    WHEN length > 120 AND length <= 180 THEN 'Between 2-3 hours'

    ELSE 'More than 3 hours' END AS filmlen_groups

    FROM film ) t1

ORDER BY  filmlen_groups
```