SQL Queries

1. Return the artist with the most number of albums

Query :

SELECT ar.artist_id, ar.name, COUNT(a.album_id) AS album_count
FROM album a
JOIN artist ar ON a.artist_id = ar.artist_id
GROUP BY ar.artist_id
ORDER BY album_count DESC LIMIT 1;

Output:

	artist_id [PK] integer	name character varying (120)	album_count bigint
1	90	Iron Maiden	21

2. Return the top three genres found in the dataset in descending order

Query:

SELECT g.genre_id, g.name AS genre_name, COUNT(t.track_id) AS track_count
FROM track t
JOIN genre g ON t.genre_id = g.genre_id
GROUP BY g.genre_id, g.name
ORDER BY track_count DESC
LIMIT 3;

Output:

	genre_id [PK] integer	genre_name character varying (120)	track_count bigint
1	1	Rock	1297
2	7	Latin	579
3	3	Metal	374

3. Return the number of tracks and average run time for each media type

Query:

```
SELECT m.media_type_id, m.name AS media_type_name,
COUNT(t.track_id) AS track_count, AVG(t.milliseconds) AS avg_runtime
FROM track t
JOIN media_type m ON t.media_type_id = m.media_type_id
GROUP BY m.media_type_id, m.name;
```

Output:

	media_type_id [PK] integer	media_type_name character varying (120)	track_count bigint	avg_runtime numeric
1	5	AAC audio file	11	276506.909090909091
2	4	Purchased AAC audio file	7	260894.714285714286
3	2	Protected AAC audio file	237	281723.873417721519
4	1	MPEG audio file	3034	265574.288727752142
5	3	Protected MPEG-4 video file	214	2342940.425233644860