- SPOTIFY INTERVIEW QUESTION -

TABLE 1: artists

artist_id	artist_name
101	Ed Sheeran
120	Drake

TABLE 2: songs

song_id	artist_id
45202	101
19960	120

TABLE 3: global_song_rank

song_id	artist_id
45202	101
19960	120

QUERY:

```
    WITH top_artist AS (
SELECT
  artist_id, DENSE_RANK() OVER (
    ORDER BY song_count DESC) AS artist_rank
FROM (
  SELECT songs.artist_id, COUNT(songs.song_id) AS song_count
  FROM songs
  INNER JOIN global_song_rank AS ranking
    ON songs.song_id = ranking.song_id
  WHERE ranking.rank <= 10, GROUP BY songs.artist_id)
    AS top_songs)

      SELECT artists.artist_name, top_artists.artist_rank
        FROM top_artists
      INNER JOIN artists
      ON top_artists.artist_id = artists.artist_id
        WHERE top_artists.atist_rank <= 5
      ORDER BY top_artists.artist_rank, artists.artist_name;
```

OUTPUT:

artist_name	artist_rank
Bad Bunny	1
Ed Sheeran	2
Adele	3
Lady Gaga	3
Katy Perry	4
Drake	5

- E X P L A N A T I O N -

QUESTION: Spotify tables containing information about the artists, songs, and music charts. Write a query to determine the top 5 artists whose songs appear in the Top 10 of the global_song_rank table the highest number of times. From now on, we'll refer to this ranking number as "song appearances".

Output the top 5 artist names in ascending order along with their song appearances ranking (not the number of song appearances, but the rank of who has the most appearances). The order of the rank should take precedence.

EXPLANATION: **STEP 1:** Firstly join the tables songs and global_song_rank tables to get a table with artist and filter the top 10 ranks, wrap the query in CTE.

STEP 2: We can accomplish this by using the above as a subquery, and implementing a DENSE_RANK, window function. DENSE_RANK will help us create a ranking based on the number of times the artists' songs appear in descending order.

STEP 3: For the final step, we'll use a CTE to find the top 5 artists, then JOIN it with the artists table to get their names.

OUTPUT:

artist_name	artist_rank
Bad Bunny	1
Ed Sheeran	2
Adele	3
Lady Gaga	3
Katy Perry	4
Drake	5