Advanced SQL Queries Index

S.no	Query Scenario	SQL Query Syntax	Category	Page
1	Retrieve Artwork Details with Artist Information:	SELECT Artwork.*, Artist.artist_name FROM Artwork JOIN Artist ON Artwork.artist_id = Artist.artist_id;	Join	14
2	List Artworks in a Specific Location:	SELECT Artwork.*, Location.location_name FROM Artwork JOIN Location ON Artwork.location_id = Location.location_id WHERE Location.location_name = 'Gallery 101';	Join	14
3	Retrieve Artworks with Exhibition History:	SELECT Artwork.*, Exhibition.exhibition_name, Exhibition.exhibition_date, Exhibition.location FROM Artwork LEFT JOIN Exhibition ON Artwork.artwork_id = Exhibition.artwork_id;	Left Join	14
4	Find Artists with More Than One Artwork:	SELECT Artist.artist_id, Artist.artist_name, COUNT(Artwork.artwork_id) as artwork_count FROM Artist JOIN Artwork ON Artist.artist_id = Artwork.artist_id	Join,Group By,Having	14

		GROUP BY Artist.artist_id, Artist.artist_name HAVING COUNT(Artwork.artwork_id) > 1;		
5	Find Categories with at Least Five Artworks:	SELECT Category.category_id, Category.category_name, COUNT(Artwork.artwork_id) as artwork_count FROM Category JOIN Artwork ON Category.category_id = Artwork.category_id GROUP BY Category.category_id, Category.category_name HAVING COUNT(Artwork.artwork_id) >= 5;	Join,Group By,Having	15
6	List Artists with Artworks in Multiple Categories:	SELECT Artist.artist_id, Artist.artist_name, COUNT(DISTINCT Artwork.category_id) as category_count FROM Artist JOIN Artwork ON Artist.artist_id = Artwork.artist_id GROUP BY Artist.artist_id, Artist.artist_name HAVING COUNT(DISTINCT Artwork.category_id) > 1;	Join,Group By,Having,Dis tinct aggregate function	15
7	List Artists with Artworks in a Specific Category:	SELECT artist_name FROM Artist WHERE artist_id IN (Nested Query	15

		SELECT DISTINCT artist_id FROM Artwork WHERE category_id = 1);		
8	.Identify Artworks in the Most Recent Exhibition:	SELECT artwork_id, title FROM Artwork WHERE artwork_id IN (SELECT artwork_id FROM Exhibition WHERE exhibition_date = (SELECT MAX(exhibition_date) FROM Exhibition));	Nested Query	15
9	List Artists with More Artworks than the Average:	SELECT artist_name, COUNT(Artwork.artwork_id) as artwork_count FROM Artist JOIN Artwork ON Artist.artist_id = Artwork.artist_id GROUP BY Artist.artist_id, artist_name HAVING COUNT(Artwork.artwork_id)>(SELECT AVG(artwork_count) FROM (SELECT COUNT(artwork_id) as artwork_count FROM Artwork GROUP BY artist_id) AS AvgArtworkCount	Nested Query,Join,Gr oup By,Having	16

);		
10	Identify Artworks with No Exhibition History:	SELECT title FROM Artwork WHERE NOT EXISTS (SELECT 1 FROM Exhibition WHERE Artwork.artwork_id = Exhibition.artwork_id);	Nested Query	16
11	Find Artworks with the Same Artist in Different Locations:	SELECT Artwork.title, Artist.artist_name, Location.location_name FROM Artwork JOIN Artist ON Artwork.artist_id = Artist.artist_id JOIN Location ON Artwork.location_id = Location.location_id WHERE Artwork.artist_id IN (SELECT artist_id FROM Artwork GROUP BY artist_id HAVING COUNT(DISTINCT location_id) > 1);	Nested Query,Join,Gr oup By,Having,Ag gregate count function	16
12	List Categories with the Most Artworks:	SELECT Category.category_name, COUNT(Artwork.artwork_id) as artwork_count FROM Category JOIN Artwork ON Category.category_id = Artwork.category_id	Join,Group by,Order by, Aggregate function count,desc	17

	GROUP BY Category.category_id, Category.category_name ORDER BY artwork_count DESC	
	LIMIT 1;	