```
--Q 1. Retrieve the names of all artists along with the number of artworks they have in the gallery, and
--list them in descending order of the number of artworks.

SELECT Name AS ArtistName, COUNT(ArtworkID) AS ArtworkCount
FROM Artists A
LEFT JOIN Artworks Ar ON A.ArtistID = Ar.ArtistID
GROUP BY Name
ORDER BY ArtworkCount DESC;
```

148 % ▾ ◂

⊞ Results ▤ Messages

	ArtistName	ArtworkCount
1	Leonardo da Vinci	1
2	Pablo Picasso	1
3	Vincent van Gogh	1

```sql
--2. List the titles of artworks created by artists from 'Spanish' and 'Dutch' nationalities, and order
--them by the year in ascending order.

SELECT Title,Year
FROM Artworks Ar
JOIN Artists A ON Ar.ArtistID = A.ArtistID
WHERE Nationality IN ('Spanish', 'Dutch')
ORDER BY Year ASC;
```

148 %

Results | Messages

	Title	Year
1	Starry Night	1889
2	Guernica	1937

--Q 1. Retrieve the
--list them in desc

```sql
--3. Find the names of all artists who have artworks in the 'Painting' category, and the number of
--artworks they have in this category.
SELECT A.Name , COUNT(Ar.ArtworkID) AS ArtworkCount
FROM Artists A
JOIN Artworks Ar ON A.ArtistID = Ar.ArtistID
JOIN Categories C ON Ar.CategoryID = C.CategoryID
WHERE C.Name = 'Painting'
GROUP BY A.Name
```

148 %

⊞ Results   🗐 Messages

	Name	ArtworkCount
1	Leonardo da Vinci	1
2	Pablo Picasso	1
3	Vincent van Gogh	1

```sql
--Q 4. List the names of artworks from the 'Modern Art Masterpieces' exhibition, along with their
--artists and categories

SELECT Ar.Title, A.Name AS ArtistName, C.Name AS CategoryName
FROM Artworks Ar
JOIN Artists A ON Ar.ArtistID = A.ArtistID
JOIN Categories C ON Ar.CategoryID = C.CategoryID
JOIN ExhibitionArtworks EA ON Ar.ArtworkID = EA.ArtworkID
JOIN Exhibitions E ON EA.ExhibitionID = E.ExhibitionID
WHERE E.Title = 'Modern Art Masterpieces';
```

148 % ▾ ◄

⊞ Results 🗐 Messages

	Title	ArtistName	CategoryName
1	Starry Night	Vincent van Gogh	Painting
2	Mona Lisa	Leonardo da Vinci	Painting
3	Guernica	Pablo Picasso	Painting

```sql
-- Q5. Find the artists who have more than two artworks in the gallery

SELECT A.Name AS ArtistName, COUNT(Ar.ArtworkID) AS ArtworkCount
FROM Artists A
JOIN Artworks Ar ON A.ArtistID = Ar.ArtistID
GROUP BY A.Name
HAVING COUNT(Ar.ArtworkID) > 2
```

148 %

Results   Messages

ArtistName	ArtworkCount

```sql
-- Q 6. Find the titles of artworks that were exhibited in both 'Modern Art Masterpieces' and
--'Renaissance Art' exhibitions

SELECT Ar.Title AS ArtworkTitle
FROM Artworks Ar
JOIN ExhibitionArtworks EA1 ON Ar.ArtworkID = EA1.ArtworkID
JOIN Exhibitions E1 ON EA1.ExhibitionID = E1.ExhibitionID
JOIN ExhibitionArtworks EA2 ON Ar.ArtworkID = EA2.ArtworkID
JOIN Exhibitions E2 ON EA2.ExhibitionID = E2.ExhibitionID
WHERE E1.Title = 'Modern Art Masterpieces'
AND E2.Title = 'Renaissance Art';
```

148 %

Results Messages

	ArtworkTitle
1	Mona Lisa

```sql
--Q 7. Find the total number of artworks in each category
SELECT C.Name AS CategoryName, COUNT(Ar.ArtworkID) AS ArtworkCount
FROM Categories C
LEFT JOIN Artworks Ar ON C.CategoryID = Ar.CategoryID
GROUP BY C.Name
ORDER BY ArtworkCount DESC;
```

148 %

Results | Messages

	CategoryName	ArtworkCount
1	Painting	3
2	Photography	0
3	Sculpture	0

```sql
--Q 8. List artists who have more than 3 artworks in the gallery
SELECT A.Name AS ArtistName, COUNT(Ar.ArtworkID) AS ArtworkCount
FROM Artists A
JOIN Artworks Ar ON A.ArtistID = Ar.ArtistID
GROUP BY A.Name
HAVING COUNT(Ar.ArtworkID) > 3
```

148 % ▼ ◄

⊞ Results ⬛ Messages

ArtistName	ArtworkCount

```sql
--Q 9. Find the artworks created by artists from a specific nationality (e.g., Spanish).

SELECT Ar.Title
FROM Artworks Ar
JOIN Artists A ON Ar.ArtistID = A.ArtistID
WHERE A.Nationality = 'Spanish';
```

148 %

⊞ Results 📊 Messages

	Title
1	Guernica

```sql
--Q 10. List exhibitions that feature artwork by both Vincent van Gogh and Leonardo da Vinci.

SELECT E.Title AS ExhibitionTitle
FROM Exhibitions E
JOIN ExhibitionArtworks EA ON E.ExhibitionID = EA.ExhibitionID
JOIN Artworks Ar ON EA.ArtworkID = Ar.ArtworkID
JOIN Artists A ON Ar.ArtistID = A.ArtistID
WHERE A.Name IN ('Vincent van Gogh', 'Leonardo da Vinci')
GROUP BY E.ExhibitionID, E.Title
HAVING COUNT(DISTINCT A.Name) = 2;
```

148 %

Results   Messages

	ExhibitionTitle
1	Modern Art Masterpieces

```sql
-- Q 6. Find the titles of artworks that were exhibited in both 'Modern Art Masterpieces' and
--'Renaissance Art' exhibitions

SELECT Ar.Title AS ArtworkTitle
FROM Artworks Ar
JOIN ExhibitionArtworks EA1 ON Ar.ArtworkID = EA1.ArtworkID
JOIN Exhibitions E1 ON EA1.ExhibitionID = E1.ExhibitionID
JOIN ExhibitionArtworks EA2 ON Ar.ArtworkID = EA2.ArtworkID
JOIN Exhibitions E2 ON EA2.ExhibitionID = E2.ExhibitionID
WHERE E1.Title = 'Modern Art Masterpieces'
AND E2.Title = 'Renaissance Art';
```

148 %

Results   Messages

	ArtworkTitle
1	Mona Lisa

```sql
--Q 7. Find the total number of artworks in each category
SELECT C.Name AS CategoryName, COUNT(Ar.ArtworkID) AS ArtworkCount
FROM Categories C
LEFT JOIN Artworks Ar ON C.CategoryID = Ar.CategoryID
GROUP BY C.Name
ORDER BY ArtworkCount DESC;
```

148 % ▼

⊞ Results 📊 Messages

	CategoryName	ArtworkCount
1	Painting	3
2	Photography	0
3	Sculpture	0

```sql
--Q 13. List the total number of artworks in each category.

SELECT C.Name AS CategoryName, COUNT(Ar.ArtworkID) AS ArtworkCount
FROM Categories C
LEFT JOIN Artworks Ar ON C.CategoryID = Ar.CategoryID
GROUP BY C.CategoryID, C.Name
ORDER BY ArtworkCount DESC;
```

48 %

Results | Messages

	CategoryName	ArtworkCount
1	Painting	3
2	Sculpture	0
3	Photography	0

```sql
--Q 14. Find the artists who have more than 2 artworks in the gallery
SELECT A.Name AS ArtistName, COUNT(Ar.ArtworkID) AS ArtworkCount
FROM Artists A
JOIN Artworks Ar ON A.ArtistID = Ar.ArtistID
GROUP BY A.ArtistID, A.Name
HAVING COUNT(Ar.ArtworkID) > 2
ORDER BY ArtworkCount DESC;
```

147 %

⊞ Results 📄 Messages

ArtistName	ArtworkCount

```sql
--Q 15. List the categories with the average year of artworks they contain,
--only for categories with more than 1 artwork.
SELECT C.Name AS CategoryName, AVG(Ar.Year) AS AverageYear
FROM Categories C
JOIN Artworks Ar ON C.CategoryID = Ar.CategoryID
GROUP BY C.CategoryID, C.Name
HAVING COUNT(Ar.ArtworkID) > 1
ORDER BY AverageYear DESC;
```

147 %

Results | Messages

	CategoryName	AverageYear
1	Painting	1776

```sql
--Q 16. Find the artworks that were exhibited in the 'Modern Art Masterpieces' exhibition.
SELECT Ar.Title AS ArtworkTitle, A.Name AS ArtistName, Ar.Year, Ar.Description
FROM Artworks Ar
JOIN ExhibitionArtworks EA ON Ar.ArtworkID = EA.ArtworkID
JOIN Exhibitions E ON EA.ExhibitionID = E.ExhibitionID
JOIN Artists A ON Ar.ArtistID = A.ArtistID
WHERE E.Title = 'Modern Art Masterpieces';
```

147 %

⊞ Results 📊 Messages

	ArtworkTitle	ArtistName	Year	Description
1	Starry Night	Vincent van Gogh	1889	A famous painting by Vincent van Gogh.
2	Mona Lisa	Leonardo da Vinci	1503	The iconic portrait by Leonardo da Vinci.
3	Guernica	Pablo Picasso	1937	Pablo Picasso-s powerful anti-war mural.

```sql
--Q 17. Find the categories where the average year of artworks is
--greater than the average year of all artworks.

SELECT C.Name AS CategoryName, AVG(Ar.Year) AS AverageYear
FROM Categories C
JOIN Artworks Ar ON C.CategoryID = Ar.CategoryID
GROUP BY C.CategoryID, C.Name
HAVING AVG(Ar.Year) > (SELECT AVG(Year) FROM Artworks);
```

147 %

Results   Messages

CategoryName	AverageYear

```sql
--Q 18. List the artworks that were not exhibited in any exhibition
SELECT Ar.Title AS ArtworkTitle, A.Name AS ArtistName, Ar.Year, Ar.Description
FROM Artworks Ar
JOIN Artists A ON Ar.ArtistID = A.ArtistID
LEFT JOIN ExhibitionArtworks EA ON Ar.ArtworkID = EA.ArtworkID
WHERE EA.ExhibitionID IS NULL;
```

147 %

Results | Messages

ArtworkTitle	ArtistName	Year	Description

```sql
--Q 19. Show artists who have artworks in the same category as "Mona Lisa."
SELECT DISTINCT A.Name AS ArtistName
FROM Artists A
JOIN Artworks Ar ON A.ArtistID = Ar.ArtistID
WHERE Ar.CategoryID = (
    SELECT CategoryID
    FROM Artworks
    WHERE Title = 'Mona Lisa'
);
```

147 %

Results | Messages

	ArtistName
1	Leonardo da Vinci
2	Pablo Picasso
3	Vincent van Gogh

```
--Q 20. List the names of artists and the number of artworks they have in the gallery.
SELECT A.Name AS ArtistName, COUNT(Ar.ArtworkID) AS ArtworkCount
FROM Artists A
LEFT JOIN Artworks Ar ON A.ArtistID = Ar.ArtistID
GROUP BY A.ArtistID, A.Name
ORDER BY ArtworkCount DESC;
```

147 %

Results | Messages

	ArtistName	ArtworkCount
1	Pablo Picasso	1
2	Vincent van Gogh	1
3	Leonardo da Vinci	1