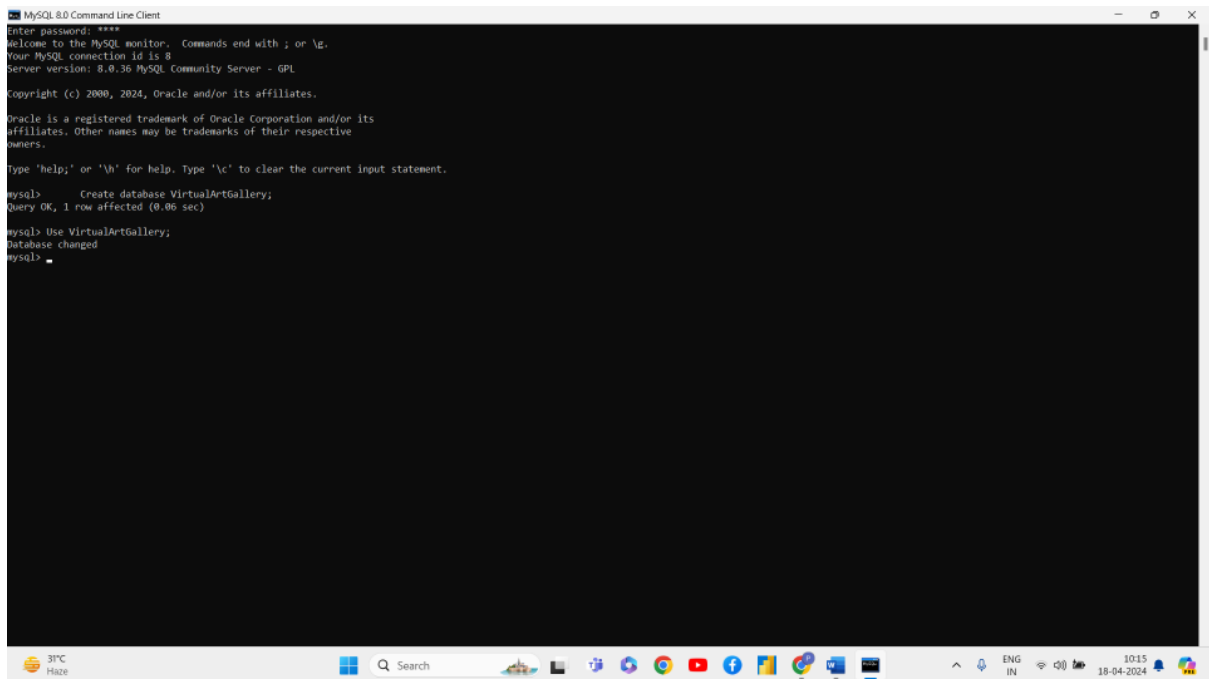


VIRTUAL ART GALLERY

1 . Creating Database Virtual Art Gallery

Create database VirtualArtGallery;

Use VirtualArtGallery;



```
MySQL 8.0 Command Line Client
Enter password: ****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.36 MySQL Community Server - GPL

Copyright (c) 2000, 2024, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> Create database VirtualArtGallery;
Query OK, 1 row affected (0.06 sec)

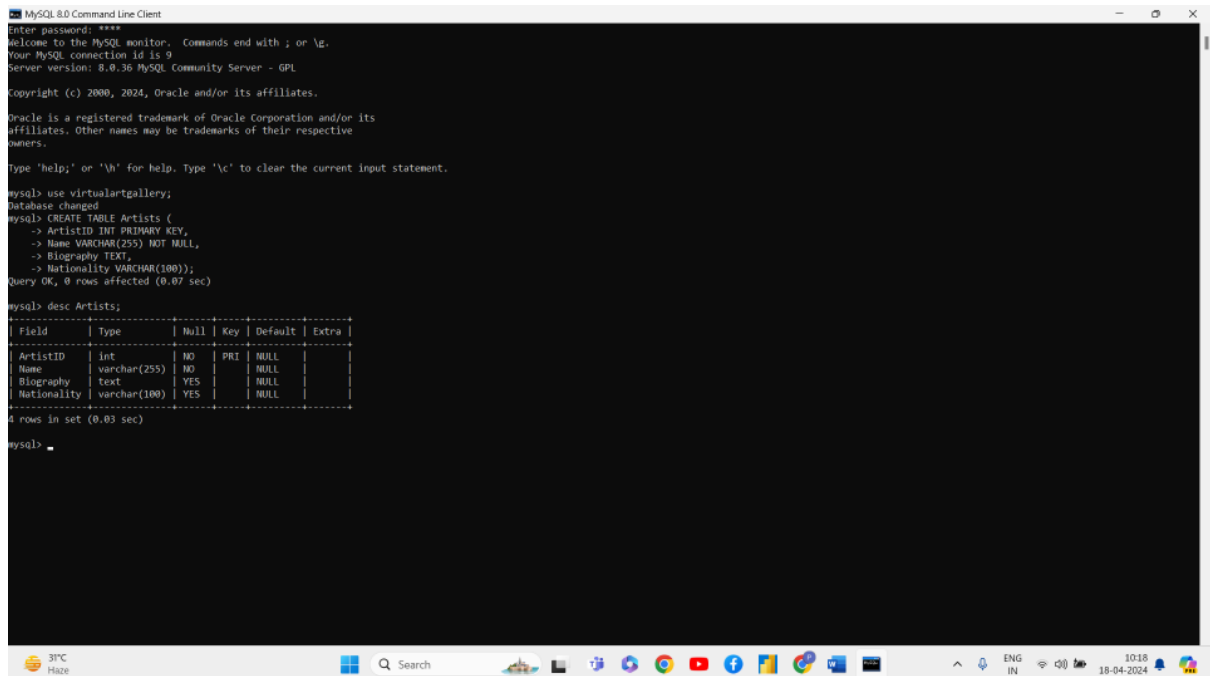
mysql> Use VirtualArtGallery;
Database changed
mysql>
```

SCHEMA

1. Artist Table

Create the Artists table

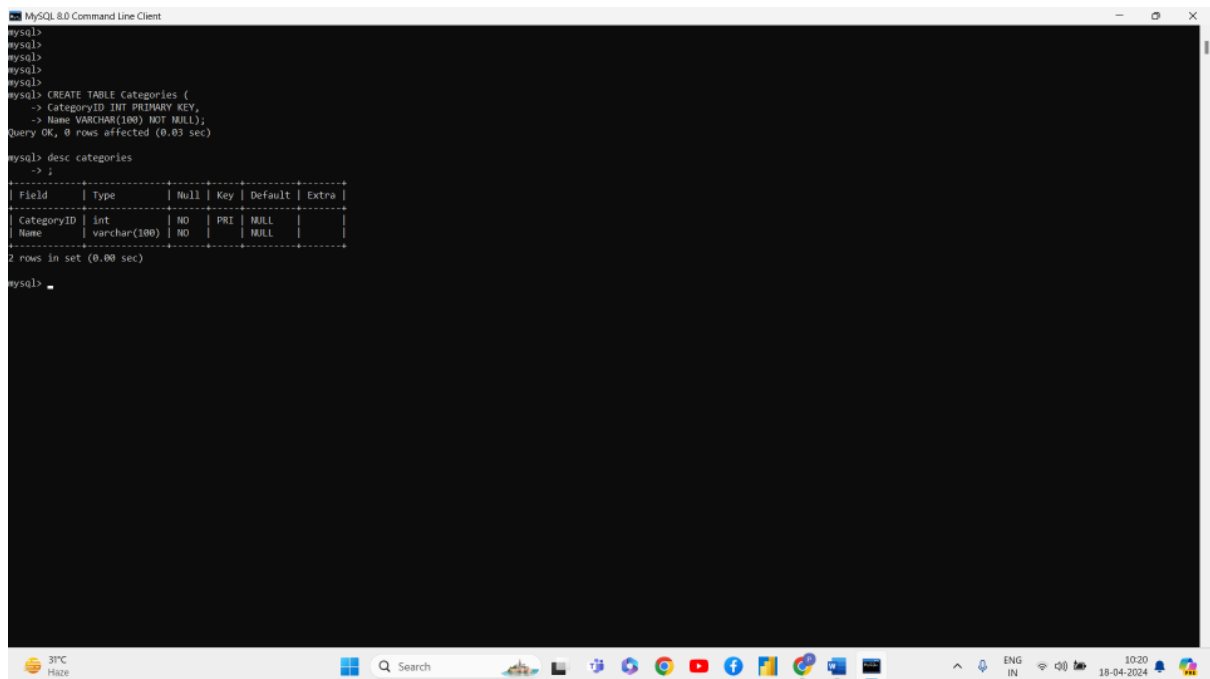
```
CREATE TABLE Artists (  
  ArtistID INT PRIMARY KEY,  
  Name VARCHAR(255) NOT NULL,  
  Biography TEXT,  
  Nationality VARCHAR(100));
```



```
MySQL 8.0 Command Line Client  
Enter password: ****  
Welcome to the MySQL monitor.  Commands end with ; or \g.  
Your MySQL connection id is 9  
Server version: 8.0.36 MySQL Community Server - GPL  
Copyright (c) 2000, 2024, Oracle and/or its affiliates.  
Oracle is a registered trademark of Oracle Corporation and/or its  
affiliates. Other names may be trademarks of their respective  
owners.  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
  
mysql> use virtualartgallery;  
Database changed  
mysql> CREATE TABLE Artists (  
  -> ArtistID INT PRIMARY KEY,  
  -> Name VARCHAR(255) NOT NULL,  
  -> Biography TEXT,  
  -> Nationality VARCHAR(100));  
Query OK, 0 rows affected (0.07 sec)  
  
mysql> desc Artists;  
+-----+  
| Field | Type | Null | Key | Default | Extra |  
+-----+  
| ArtistID | int | NO | PRI | NULL | |  
| Name | varchar(255) | NO | | NULL | |  
| Biography | text | YES | | NULL | |  
| Nationality | varchar(100) | YES | | NULL | |  
+-----+  
4 rows in set (0.03 sec)  
  
mysql>
```

2. Create the Categories table

```
CREATE TABLE Categories (  
CategoryID INT PRIMARY KEY,  
Name VARCHAR(100) NOT NULL);
```



The screenshot shows a MySQL 8.0 Command Line Client window. The user has entered the following commands:

```
mysql>  
mysql>  
mysql>  
mysql>  
mysql> CREATE TABLE Categories (  
-> CategoryID INT PRIMARY KEY,  
-> Name VARCHAR(100) NOT NULL);  
Query OK, 0 rows affected (0.03 sec)  
  
mysql> desc categories  
-> ;
```

The output of the DESCRIBE command is shown as a table:

Field	Type	Null	Key	Default	Extra
CategoryID	int	NO	PR	NULL	
Name	varchar(100)	NO		NULL	

2 rows in set (0.00 sec)

The Windows taskbar at the bottom shows the date as 18-04-2024 and the time as 10:20.

3. Create the Artworks table

```
CREATE TABLE Artworks (  
ArtworkID INT PRIMARY KEY,  
Title VARCHAR(255) NOT NULL,  
ArtistID INT,  
CategoryID INT,  
Year INT,  
Description TEXT,  
ImageURL VARCHAR(255),  
FOREIGN KEY (ArtistID) REFERENCES Artists (ArtistID),  
FOREIGN KEY (CategoryID) REFERENCES Categories (CategoryID));
```

```
MySQL 8.0 Command Line Client
Enter password: ****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 10
Server version: 8.0.36 MySQL Community Server - GPL

Copyright (c) 2000, 2024, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> use virtualartgallery;
Database changed
mysql> CREATE TABLE Artworks (
  -> ArtworkID INT PRIMARY KEY,
  -> Title VARCHAR(255) NOT NULL,
  -> ArtistID INT,
  -> CategoryID INT,
  -> Year INT,
  -> Description TEXT,
  -> ImageURL VARCHAR(255),
  -> FOREIGN KEY (ArtistID) REFERENCES Artists (ArtistID),
  -> FOREIGN KEY (CategoryID) REFERENCES Categories (CategoryID));
Query OK, 0 rows affected (0.04 sec)

mysql> desc Artworks;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| ArtworkID | int | NO | PRI | NULL | |
| Title | varchar(255) | NO | | NULL | |
| ArtistID | int | YES | MUL | NULL | |
| CategoryID | int | YES | MUL | NULL | |
| Year | int | YES | | NULL | |
| Description | text | YES | | NULL | |
| ImageURL | varchar(255) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
7 rows in set (0.01 sec)

mysql>
```

4. Create the Exhibitions table

```
CREATE TABLE Exhibitions (
ExhibitionID INT PRIMARY KEY,
Title VARCHAR(255) NOT NULL,
StartDate DATE,
EndDate DATE,
Description TEXT);
```

```
MySQL 8.0 Command Line Client
mysql>
mysql>
mysql>
mysql>
mysql>
mysql> CREATE TABLE Exhibitions (
  -> ExhibitionID INT PRIMARY KEY,
  -> Title VARCHAR(255) NOT NULL,
  -> StartDate DATE,
  -> EndDate DATE,
  -> Description TEXT);
Query OK, 0 rows affected (0.03 sec)

mysql> desc Exhibitions;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| ExhibitionID | int | NO | PRI | NULL | |
| Title | varchar(255) | NO | | NULL | |
| StartDate | date | YES | | NULL | |
| EndDate | date | YES | | NULL | |
| Description | text | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.01 sec)

mysql>
```

5. Create a table to associate artworks with exhibitions

```
CREATE TABLE ExhibitionArtworks (
ExhibitionID INT,
ArtworkID INT,
PRIMARY KEY (ExhibitionID, ArtworkID),
FOREIGN KEY (ExhibitionID) REFERENCES Exhibitions (ExhibitionID),
FOREIGN KEY (ArtworkID) REFERENCES Artworks (ArtworkID));
```

```
MySQL 8.0 Command Line Client
mysql>
mysql>
mysql>
mysql>
mysql>
mysql> CREATE TABLE ExhibitionArtworks (
-> ExhibitionID INT,
-> ArtworkID INT,
-> PRIMARY KEY (ExhibitionID, ArtworkID),
-> FOREIGN KEY (ExhibitionID) REFERENCES Exhibitions (ExhibitionID),
-> FOREIGN KEY (ArtworkID) REFERENCES Artworks (ArtworkID));
Query OK, 0 rows affected (0.04 sec)

mysql> desc ExhibitionArtworks;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| ExhibitionID | int | NO | PRI | NULL | |
| ArtworkID | int | NO | PRI | NULL | |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)

mysql>
```

DML(Insert sample data to tables)

1. Insert sample data into the Artists table

```
INSERT INTO Artists (ArtistID, Name, Biography, Nationality)
```

VALUES

- (1, 'Pablo Picasso', 'Renowned Spanish painter and sculptor.', 'Spanish'),
- (2, 'Vincent van Gogh', 'Dutch post-impressionist painter.', 'Dutch'),
- (3, 'Leonardo da Vinci', 'Italian polymath of the Renaissance.', 'Italian'),
- (4, 'Frida Kahlo', 'Mexican painter known for her self-portraits.', 'Mexican'),
- (5, 'Michelangelo', 'Italian painter and architect.', 'Italian'),
- (6, 'Ravi varma ', 'Indian modernist artist.', 'Indian'),
- (7, 'Claude Monet', 'French impressionist painter.', 'French'),
- (8, 'Salvador Dalí', 'Spanish surrealist artist.', 'Spanish'),
- (9, 'Rembrandt', 'Dutch painter and printmaker.', 'Dutch'),
- (10, 'Andy Warhol', 'American artist and leading figure in the pop art.', 'American'),
- (11, 'Edvard Munch', 'Norwegian painter.', 'Norwegian'),
- (12, 'Raphael', 'Italian painter and architect of the High Renaissance.', 'Italian');

```

mysql> INSERT INTO Artists (ArtistID, Name, Biography, Nationality) VALUES
-> (1, 'Pablo Picasso', 'Renowned Spanish painter and sculptor.', 'Spanish'),
-> (2, 'Vincent van Gogh', 'Dutch post-impressionist painter.', 'Dutch'),
-> (3, 'Leonardo da Vinci', 'Italian polymath of the Renaissance.', 'Italian'),
-> (4, 'Frida Kahlo', 'Mexican painter known for her self-portraits.', 'Mexican'),
-> (5, 'Michelangelo', 'Italian painter and architect.', 'Italian'),
-> (6, 'Ravi varma', 'Indian modernist artist.', 'Indian'),
-> (7, 'Claude Monet', 'French impressionist painter.', 'French'),
-> (8, 'Salvador Dalí', 'Spanish surrealist artist.', 'Spanish'),
-> (9, 'Rembrandt', 'Dutch painter and printmaker.', 'Dutch'),
-> (10, 'Andy Warhol', 'American artist and leading figure in the pop art.', 'American'),
-> (11, 'Edvard Munch', 'Norwegian painter.', 'Norwegian'),
-> (12, 'Raphael', 'Italian painter and architect of the High Renaissance.', 'Italian');
Query OK, 12 rows affected (0.01 sec)
Records: 12 Duplicates: 0 Warnings: 0

mysql> select * from artists;
+-----+-----+-----+-----+
| ArtistID | Name | Biography | Nationality |
+-----+-----+-----+-----+
| 1 | Pablo Picasso | Renowned Spanish painter and sculptor. | Spanish |
| 2 | Vincent van Gogh | Dutch post-impressionist painter. | Dutch |
| 3 | Leonardo da Vinci | Italian polymath of the Renaissance. | Italian |
| 4 | Frida Kahlo | Mexican painter known for her self-portraits. | Mexican |
| 5 | Michelangelo | Italian painter and architect. | Italian |
| 6 | Ravi varma | Indian modernist artist. | Indian |
| 7 | Claude Monet | French impressionist painter. | French |
| 8 | Salvador Dalí | Spanish surrealist artist. | Spanish |
| 9 | Rembrandt | Dutch painter and printmaker. | Dutch |
| 10 | Andy Warhol | American artist and leading figure in the pop art. | American |
| 11 | Edvard Munch | Norwegian painter. | Norwegian |
| 12 | Raphael | Italian painter and architect of the High Renaissance. | Italian |
+-----+-----+-----+-----+
12 rows in set (0.00 sec)

mysql>

```

2.INSERT INTO Categories (CategoryID, Name) VALUES

(11, 'Painting'),

(22, 'Sculpture'),

(33, 'Photography'),

(44, 'Pottery'),

(55, 'Drawing'),

(66, 'Printmaking'),

(77, 'Poetry'),

(88, 'Digital Art'),

(99, 'Mixed Media'),

(100, 'Installation Art'),

(111, 'Performance Art'),

(112, 'Ceramics');


```
MySQL 8.0 Command Line Client
mysql> INSERT INTO Categories (CategoryID, Name) VALUES
-> (11, 'Painting'),
-> (22, 'Sculpture'),
-> (33, 'Photography'),
-> (44, 'Pottery'),
-> (55, 'Drawing'),
-> (66, 'Printmaking'),
-> (77, 'Poetry'),
-> (88, 'Digital Art'),
-> (99, 'Mixed Media'),
-> (100, 'Installation Art'),
-> (111, 'Performance Art'),
-> (112, 'Ceramics');
Query OK, 12 rows affected (0.01 sec)
Records: 12 Duplicates: 0 Warnings: 0

mysql> select * from categories;
+-----+-----+
| CategoryID | Name          |
+-----+-----+
| 11         | Painting      |
| 22         | Sculpture     |
| 33         | Photography   |
| 44         | Pottery       |
| 55         | Drawing       |
| 66         | Printmaking   |
| 77         | Poetry        |
| 88         | Digital Art   |
| 99         | Mixed Media   |
| 100        | Installation Art |
| 111        | Performance Art |
| 112        | Ceramics      |
+-----+-----+
12 rows in set (0.00 sec)

mysql>
```

```

3.INSERT INTO Artworks (ArtworkID, Title, ArtistID, CategoryID, Year, Description, ImageURL)
VALUES
(550, 'Starry Night', 2, 11, 1889, 'A famous painting by Vincent van Gogh.', 'starry_night.jpg'),
(551, 'Mona Lisa', 3, 22, 1503, 'The iconic portrait by Leonardo da Vinci.', 'mona_lisa.jpg'),
(552, 'Pain in her eyes', 1, 33, 1937, 'Pablo Picasso\'s powerful anti-war mural.', 'pain.jpg'),
(553, 'The Persistence of Memory', 4, 44, 1931, 'Salvador Dali\'s melting clocks masterpiece.',
'persistenceofmemory.jpg'),
(554, 'The Scream', 5, 55, 1893, 'Edvard Munch\'s iconic expressionist painting.', 'the_scream.jpg'),
(555, 'The Birth of Venus', 6, 66, 1486, 'Rembrandt\'s famous Renaissance painting.',
'birthofvenus.jpg'),
(556, 'The Last Supper', 7, 77, 1498, 'Leonardo da Vinci\'s depiction of the Last Supper.',
'lastsupper.jpg'),
(557, 'Girl with a Pearl Earring', 8, 88, 1665, 'Ravi varma\'s captivating portrait.',
'girlwithpearlearring.jpg'),
(558, 'Lost somewhere', 9, 99, 1889, 'Andy warhol\'s swirling night sky masterpiece.',
'somewhere.jpg'),
(559, 'The Great Wave off Kanagawa', 10, 100, 1831, 'Raphael\'s iconic Japanese print.',
'great_wave.jpg'),
(560, 'The Dream', 11, 111, 1907, 'Frida kahlo\'s romantic gold leaf painting.', 'thedream.jpg'),
(561, 'Fairies In Rome', 12, 112, 1907, 'groundbreaking cubist artwork of Michelangelo', 'fairies in
rome.jpg');

```

```
MySQL 8.0 Command Line Client
mysql>
mysql> INSERT INTO Artworks (ArtworkID, Title, ArtistID, CategoryID, Year, Description, ImageURL)
-> VALUES
-> (550, 'Starry Night', 2, 11, 1889, 'A famous painting by Vincent van Gogh.', 'starry_night.jpg'),
-> (551, 'Mona Lisa', 3, 22, 1503, 'The iconic portrait by Leonardo da Vinci.', 'mona_lisa.jpg'),
-> (552, 'Pain in her eyes', 1, 33, 1937, 'Pablo Picasso's powerful anti-war mural.', 'pain.jpg'),
-> (553, 'The Persistence of Memory', 4, 44, 1931, 'Salvador Dali's melting clocks masterpiece.', 'persistenceofmemory.jpg'),
-> (554, 'The Scream', 5, 55, 1893, 'Edvard Munch's iconic expressionist painting.', 'the_scream.jpg'),
-> (555, 'The Birth of Venus', 6, 66, 1486, 'Rembrandt's famous Renaissance painting.', 'birthofvenus.jpg'),
-> (556, 'The Last Supper', 7, 77, 1498, 'Leonardo da Vinci's depiction of the Last Supper.', 'lastsupper.jpg'),
-> (557, 'Girl with a Pearl Earring', 8, 88, 1665, 'Ravi varma's captivating portrait.', 'girlwithpearlearring.jpg'),
-> (558, 'Lost somewhere', 9, 99, 1889, 'Andy warhol's swirling night sky masterpiece.', 'somewhere.jpg'),
-> (559, 'The Great Wave off Kanagawa', 10, 100, 1831, 'Raphael's iconic Japanese print.', 'great_wave.jpg'),
-> (560, 'The Dream', 11, 111, 1907, 'Frida kahlo's romantic gold leaf painting.', 'thedream.jpg'),
-> (561, 'Fairies In Rome', 12, 112, 1907, 'groundbreaking cubist artwork of Michelangelo', 'fairies in rome.jpg');
Query OK, 12 rows affected (0.01 sec)
Records: 12 Duplicates: 0 Warnings: 0

mysql> select * from artworks;
+-----+-----+-----+-----+-----+-----+-----+
| ArtworkID | Title                | ArtistID | CategoryID | Year | Description                                     | ImageURL                |
+-----+-----+-----+-----+-----+-----+-----+
| 550 | Starry Night          | 2        | 11         | 1889 | A famous painting by Vincent van Gogh.       | starry_night.jpg       |
| 551 | Mona Lisa             | 3        | 22         | 1503 | The iconic portrait by Leonardo da Vinci.    | mona_lisa.jpg          |
| 552 | Pain in her eyes      | 1        | 33         | 1937 | Pablo Picasso's powerful anti-war mural.     | pain.jpg               |
| 553 | The Persistence of Memory | 4        | 44         | 1931 | Salvador Dali's melting clocks masterpiece.  | persistenceofmemory.jpg |
| 554 | The Scream            | 5        | 55         | 1893 | Edvard Munch's iconic expressionist painting. | the_scream.jpg         |
| 555 | The Birth of Venus    | 6        | 66         | 1486 | Rembrandt's famous Renaissance painting.     | birthofvenus.jpg       |
| 556 | The Last Supper       | 7        | 77         | 1498 | Leonardo da Vinci's depiction of the Last Supper. | lastsupper.jpg         |
| 557 | Girl with a Pearl Earring | 8        | 88         | 1665 | Ravi varma's captivating portrait.           | girlwithpearlearring.jpg |
| 558 | Lost somewhere        | 9        | 99         | 1889 | Andy warhol's swirling night sky masterpiece. | somewhere.jpg          |
| 559 | The Great Wave off Kanagawa | 10       | 100        | 1831 | Raphael's iconic Japanese print.             | great_wave.jpg         |
| 560 | The Dream             | 11       | 111        | 1907 | Frida kahlo's romantic gold leaf painting.   | thedream.jpg           |
| 561 | Fairies In Rome       | 12       | 112        | 1907 | groundbreaking cubist artwork of Michelangelo | fairies in rome.jpg     |
+-----+-----+-----+-----+-----+-----+-----+
12 rows in set (0.00 sec)

mysql>
```

```

4.INSERT INTO Exhibitions (ExhibitionID, Title, StartDate, EndDate, Description) VALUES
(200, 'Modern Art Masterpieces', '2023-01-01', '2023-03-01', 'A collection of modern art
masterpieces. '),
(201, 'Renaissance Art', '2023-04-01', '2023-06-01', 'A showcase of Renaissance art treasures. '),
(202, 'Impressionist Exhibition', '2023-07-01', '2023-09-01', 'Featuring works by famous Impressionist
painters. '),
(203, 'Abstract Art Show', '2023-10-01', '2023-12-01', 'Exploring the world of abstract art. '),
(204, 'Sculpture Symposium', '2024-01-01', '2024-03-01', 'A display of contemporary sculpture
pieces. '),
(205, 'Photography Exhibition', '2024-04-01', '2024-06-01', 'Showcasing stunning photographic
works. '),
(206, 'Cultural Heritage Expo', '2024-07-01', '2024-09-01', 'Celebrating diverse cultural heritage
through art. '),
(207, 'Futuristic Art Installation', '2024-10-01', '2024-12-01', 'An immersive experience of futuristic
art. '),
(208, 'Nature-Inspired Art Showcase', '2025-01-01', '2025-03-01', 'Inspired by the beauty of nature. '),
(209, 'Historical Artifacts Exhibition', '2025-04-01', '2025-06-01', 'Exploring historical artifacts from
around the world. '),
(210, 'Fantasy Art Gallery', '2025-07-01', '2025-09-01', 'Journey into the realm of fantasy through
art. '),
(211, 'Interactive Digital Art Display', '2025-10-01', '2025-12-01', 'Engage with interactive digital art
installations. ');

```

```

MySQL 8.0 Command Line Client
mysql>
mysql>
mysql>
mysql>
mysql>
mysql> INSERT INTO Exhibitions (ExhibitionID, Title, StartDate, EndDate, Description) VALUES
-> (200, 'Modern Art Masterpieces', '2023-01-01', '2023-03-01', 'A collection of modern art masterpieces.'),
-> (201, 'Renaissance Art', '2023-04-01', '2023-06-01', 'A showcase of Renaissance art treasures.'),
-> (202, 'Impressionist Exhibition', '2023-07-01', '2023-09-01', 'Featuring works by famous Impressionist painters.'),
-> (203, 'Abstract Art Show', '2023-10-01', '2023-12-01', 'Exploring the world of abstract art.'),
-> (204, 'Sculpture Symposium', '2024-01-01', '2024-03-01', 'A display of contemporary sculpture pieces.'),
-> (205, 'Photography Exhibition', '2024-04-01', '2024-06-01', 'Showcasing stunning photographic works.'),
-> (206, 'Cultural Heritage Expo', '2024-07-01', '2024-09-01', 'Celebrating diverse cultural heritage through art.'),
-> (207, 'Futuristic Art Installation', '2024-10-01', '2024-12-01', 'An immersive experience of futuristic art.'),
-> (208, 'Nature-Inspired Art Showcase', '2025-01-01', '2025-03-01', 'Inspired by the beauty of nature.'),
-> (209, 'Historical Artifacts Exhibition', '2025-04-01', '2025-06-01', 'Exploring historical artifacts from around the world.'),
-> (210, 'Fantasy Art Gallery', '2025-07-01', '2025-09-01', 'Journey into the realm of fantasy through art.'),
-> (211, 'Interactive Digital Art Display', '2025-10-01', '2025-12-01', 'Engage with interactive digital art installations.');
```

Query OK, 12 rows affected (0.01 sec)
Records: 12 Duplicates: 0 Warnings: 0

```

mysql> select * from exhibitions;
```

ExhibitionID	Title	StartDate	EndDate	Description
200	Modern Art Masterpieces	2023-01-01	2023-03-01	A collection of modern art masterpieces.
201	Renaissance Art	2023-04-01	2023-06-01	A showcase of Renaissance art treasures.
202	Impressionist Exhibition	2023-07-01	2023-09-01	Featuring works by famous Impressionist painters.
203	Abstract Art Show	2023-10-01	2023-12-01	Exploring the world of abstract art.
204	Sculpture Symposium	2024-01-01	2024-03-01	A display of contemporary sculpture pieces.
205	Photography Exhibition	2024-04-01	2024-06-01	Showcasing stunning photographic works.
206	Cultural Heritage Expo	2024-07-01	2024-09-01	Celebrating diverse cultural heritage through art.
207	Futuristic Art Installation	2024-10-01	2024-12-01	An immersive experience of futuristic art.
208	Nature-Inspired Art Showcase	2025-01-01	2025-03-01	Inspired by the beauty of nature.
209	Historical Artifacts Exhibition	2025-04-01	2025-06-01	Exploring historical artifacts from around the world.
210	Fantasy Art Gallery	2025-07-01	2025-09-01	Journey into the realm of fantasy through art.
211	Interactive Digital Art Display	2025-10-01	2025-12-01	Engage with interactive digital art installations.

12 rows in set (0.00 sec)

```

mysql>
```

5.INSERT INTO ExhibitionArtworks (ExhibitionID, ArtworkID)

VALUES

(200,550),
(201,551),
(202,552),
(203, 553),
(204,554),
(205,555),
(206,556),
(207,557),
(208,558),
(209,559),
(210,560),
(211,561);

```
MySQL 8.0 Command Line Client
mysql>
mysql>
mysql> INSERT INTO ExhibitionArtworks (ExhibitionID, ArtworkID)
-> VALUES
-> (200,550),
-> (201,551),
-> (202,552),
-> (203, 553),
-> (204,554),
-> (205,555),
-> (206,556),
-> (207,557),
-> (208,558),
-> (209,559),
-> (210,560),
-> (211,561);
Query OK, 12 rows affected (0.01 sec)
Records: 12 Duplicates: 0 Warnings: 0

mysql> select * from Exhibitionartworks;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'from Exhibitionartworks' at line 1
mysql> select *from Exhibitionartworks;
+-----+-----+
| ExhibitionID | ArtworkID |
+-----+-----+
| 200 | 550 |
| 201 | 551 |
| 202 | 552 |
| 203 | 553 |
| 204 | 554 |
| 205 | 555 |
| 206 | 556 |
| 207 | 557 |
| 208 | 558 |
| 209 | 559 |
| 210 | 560 |
| 211 | 561 |
+-----+-----+
12 rows in set (0.00 sec)

mysql>
```

QUERIES

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

```
MySQL 8.0 Command Line Client
mysql>
mysql>
mysql>
mysql>
mysql>
mysql> SELECT Artists.Name, COUNT(Artworks.ArtworkID) AS ArtworkCount
        -> FROM Artists
        -> LEFT JOIN Artworks ON Artists.ArtistID = Artworks.ArtistID
        -> GROUP BY Artists.ArtistID
        -> ORDER BY ArtworkCount DESC;
+-----+-----+
| Name          | ArtworkCount |
+-----+-----+
| Pablo Picasso | 1            |
| Vincent van Gogh | 1          |
| Leonardo da Vinci | 1          |
| Frida Kahlo   | 1            |
| Michelangelo  | 1            |
| Ravi varma    | 1            |
| Claude Monet  | 1            |
| Salvador Dali | 1            |
| Rembrandt     | 1            |
| Andy Warhol   | 1            |
| Edvard Munch  | 1            |
| Raphael       | 1            |
+-----+-----+
12 rows in set (0.02 sec)

mysql>
```

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

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

```
MySQL 8.0 Command Line Client
mysql>
mysql>
mysql>
mysql>
mysql> SELECT Artworks.Title
-> FROM Artworks
-> JOIN Artists ON Artworks.ArtistID = Artists.ArtistID
-> WHERE Artists.Nationality IN ('Spanish', 'Dutch')
-> ORDER BY Artworks.Year ASC;
+-----+
| Title |
+-----+
| Girl with a Pearl Earring |
| Starry Night |
| Lost somewhere |
| Pain in her eyes |
+-----+
4 rows in set (0.00 sec)

mysql>
```

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 Artists.Name AS ArtistName, COUNT(Artworks.ArtworkID) AS ArtworkCount
FROM Artists
JOIN Artworks ON Artists.ArtistID = Artworks.ArtistID
JOIN Categories ON Artworks.CategoryID = Categories.CategoryID
JOIN ExhibitionArtworks ON Artworks.ArtworkID = ExhibitionArtworks.ArtworkID
WHERE Categories.Name = 'Painting'
GROUP BY Artists.Name;
```



```
MySQL 8.0 Command Line Client
mysql>
mysql>
mysql>
mysql> SELECT Artists.Name AS ArtistName, COUNT(Artworks.ArtworkID) AS ArtworkCount
    -> FROM Artists
    -> JOIN Artworks ON Artists.ArtistID = Artworks.ArtistID
    -> JOIN Categories ON Artworks.CategoryID = Categories.CategoryID
    -> JOIN ExhibitionArtworks ON Artworks.ArtworkID = ExhibitionArtworks.ArtworkID
    -> WHERE Categories.Name = 'Painting'
    -> GROUP BY Artists.Name;
+-----+-----+
| ArtistName | ArtworkCount |
+-----+-----+
| Vincent van Gogh | 1 |
+-----+-----+
1 row in set (0.00 sec)

mysql>
```

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

```
SELECT Artworks.Title AS Artwork_Name, Artists.Name AS Artist_Name, Categories.Name AS
Category_Name

FROM Artworks

JOIN ExhibitionArtworks ON Artworks.ArtworkID = ExhibitionArtworks.ArtworkID

JOIN Exhibitions ON ExhibitionArtworks.ExhibitionID = Exhibitions.ExhibitionID

JOIN Artists ON Artworks.ArtistID = Artists.ArtistID

JOIN Categories ON Artworks.CategoryID = Categories.CategoryID

WHERE Exhibitions.Title = 'Modern Art Masterpieces';
```

```
MySQL 8.0 Command Line Client
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql> SELECT Artworks.Title AS Artwork_Name, Artists.Name AS Artist_Name, Categories.Name AS Category_Name
-> FROM Artworks
-> JOIN ExhibitionArtworks ON Artworks.ArtworkID = ExhibitionArtworks.ArtworkID
-> JOIN Exhibitions ON ExhibitionArtworks.ExhibitionID = Exhibitions.ExhibitionID
-> JOIN Artists ON Artworks.ArtistID = Artists.ArtistID
-> JOIN Categories ON Artworks.CategoryID = Categories.CategoryID
-> WHERE Exhibitions.Title = 'Modern Art Masterpieces';
+-----+-----+-----+
| Artwork_Name | Artist_Name | Category_Name |
+-----+-----+-----+
| Starry Night | Vincent van Gogh | Painting |
+-----+-----+-----+
1 row in set (0.00 sec)

mysql>
```

5. Find the artists who have more than two artworks in the gallery.

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

```
MySQL 8.0 Command Line Client
mysql>
mysql>
mysql>
mysql> SELECT Artists.ArtistID, Artists.Name, COUNT(Artworks.ArtworkID) AS ArtworkCount
--> FROM Artists
--> JOIN Artworks ON Artists.ArtistID = Artworks.ArtistID
--> GROUP BY Artists.ArtistID
--> HAVING COUNT(Artworks.ArtworkID) > 2;
+-----+-----+-----+
| ArtistID | Name           | ArtworkCount |
+-----+-----+-----+
| 3        | Leonardo da Vinci | 4            |
+-----+-----+-----+
1 row in set (0.00 sec)

mysql>
```

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

```
SELECT a.Title
FROM Artworks a
JOIN ExhibitionArtworks ea1 ON a.ArtworkID = ea1.ArtworkID
JOIN ExhibitionArtworks ea2 ON a.ArtworkID = ea2.ArtworkID
JOIN Exhibitions e1 ON ea1.ExhibitionID = e1.ExhibitionID
JOIN Exhibitions e2 ON ea2.ExhibitionID = e2.ExhibitionID
WHERE e1.Title = 'Modern Art Masterpieces'
AND e2.Title = 'Renaissance Art';
```

```
MySQL 8.0 Command Line Client
mysql>
mysql> SELECT DISTINCT a.Title
--> FROM Artworks a
--> JOIN ExhibitionArtworks ea1 ON a.ArtworkID = ea1.ArtworkID
--> JOIN ExhibitionArtworks ea2 ON a.ArtworkID = ea2.ArtworkID
--> JOIN Exhibitions e1 ON ea1.ExhibitionID = e1.ExhibitionID
--> JOIN Exhibitions e2 ON ea2.ExhibitionID = e2.ExhibitionID
--> WHERE e1.Title = 'Modern Art Masterpieces' AND e2.Title = 'Renaissance Art';
+-----+
| Title |
+-----+
| Mona Lisa |
+-----+
1 row in set (0.00 sec)

mysql>
```

7. Find the total number of artworks in each category

```
SELECT c.Name AS Category, COUNT(a.ArtworkID) AS TotalArtworks
FROM Categories c
LEFT JOIN Artworks a ON c.CategoryID = a.CategoryID
GROUP BY c.Name;
```

```
MySQL 8.0 Command Line Client
mysql>
mysql>
mysql>
mysql>
mysql>
mysql> SELECT c.Name AS Category, COUNT(a.ArtworkID) AS TotalArtworks
mysql>   -> FROM Categories c
mysql>   -> LEFT JOIN Artworks a ON c.CategoryID = a.CategoryID
mysql>   -> GROUP BY c.Name;
+-----+-----+
| Category | TotalArtworks |
+-----+-----+
| Painting | 1 |
| Sculpture | 1 |
| Photography | 1 |
| Pottery | 1 |
| Drawing | 1 |
| Printmaking | 1 |
| Poetry | 1 |
| Digital Art | 1 |
| Mixed Media | 1 |
| Installation Art | 1 |
| Performance Art | 1 |
| Ceramics | 1 |
+-----+-----+
12 rows in set (0.01 sec)

mysql>
```

8. List artists who have more than 3 artworks in the gallery.

```
SELECT Artists.ArtistID, Artists.Name, COUNT(Artworks.ArtworkID) AS ArtworkCount
FROM Artists
JOIN Artworks ON Artists.ArtistID = Artworks.ArtistID
GROUP BY Artists.ArtistID
HAVING COUNT(Artworks.ArtworkID) > 3;
```

```
MySQL 8.0 Command Line Client
mysql>
mysql>
mysql> SELECT Artists.ArtistID, Artists.Name, COUNT(Artworks.ArtworkID) AS ArtworkCount
    -> FROM Artists
    -> JOIN Artworks ON Artists.ArtistID = Artworks.ArtistID
    -> GROUP BY Artists.ArtistID
    -> HAVING COUNT(Artworks.ArtworkID) > 3;
+-----+-----+-----+
| ArtistID | Name           | ArtworkCount |
+-----+-----+-----+
| 3        | Leonardo da Vinci | 4            |
+-----+-----+-----+
1 row in set (0.01 sec)

mysql>
```

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

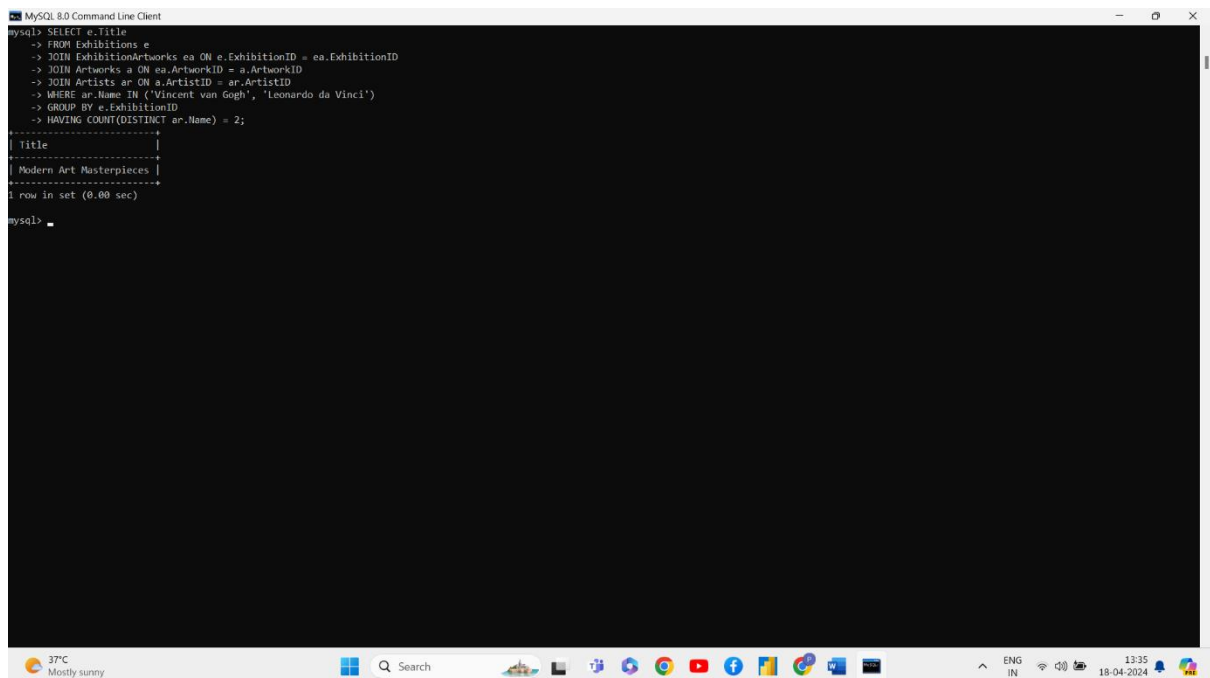
```
SELECT Artworks.*
FROM Artworks
JOIN Artists ON Artworks.ArtistID = Artists.ArtistID
WHERE Artists.Nationality = 'Spanish';
```

```
MySQL 8.0 Command Line Client
mysql>
mysql>
mysql>
mysql>
mysql>
mysql> SELECT Artworks.*
      -> FROM Artworks
      -> JOIN Artists ON Artworks.ArtistID = Artists.ArtistID
      -> WHERE Artists.Nationality = 'Spanish';
+-----+-----+-----+-----+-----+-----+
| ArtworkID | Title | ArtistID | CategoryID | Year | Description | ImageURL |
+-----+-----+-----+-----+-----+-----+
| 552 | Pain in her eyes | 1 | 33 | 1937 | Pablo Picasso's powerful anti-war mural. | pain.jpg |
| 557 | Girl with a Pearl Earring | 8 | 88 | 1665 | Ravi varma's captivating portrait. | girlwithpearlearring.jpg |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)

mysql>
```

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

```
SELECT e.Title
FROM Exhibitions e
JOIN ExhibitionArtworks ea ON e.ExhibitionID = ea.ExhibitionID
JOIN Artworks a ON ea.ArtworkID = a.ArtworkID
JOIN Artists ar ON a.ArtistID = ar.ArtistID
WHERE ar.Name IN ('Vincent van Gogh', 'Leonardo da Vinci')
GROUP BY e.ExhibitionID
HAVING COUNT(DISTINCT ar.Name) = 2;
```

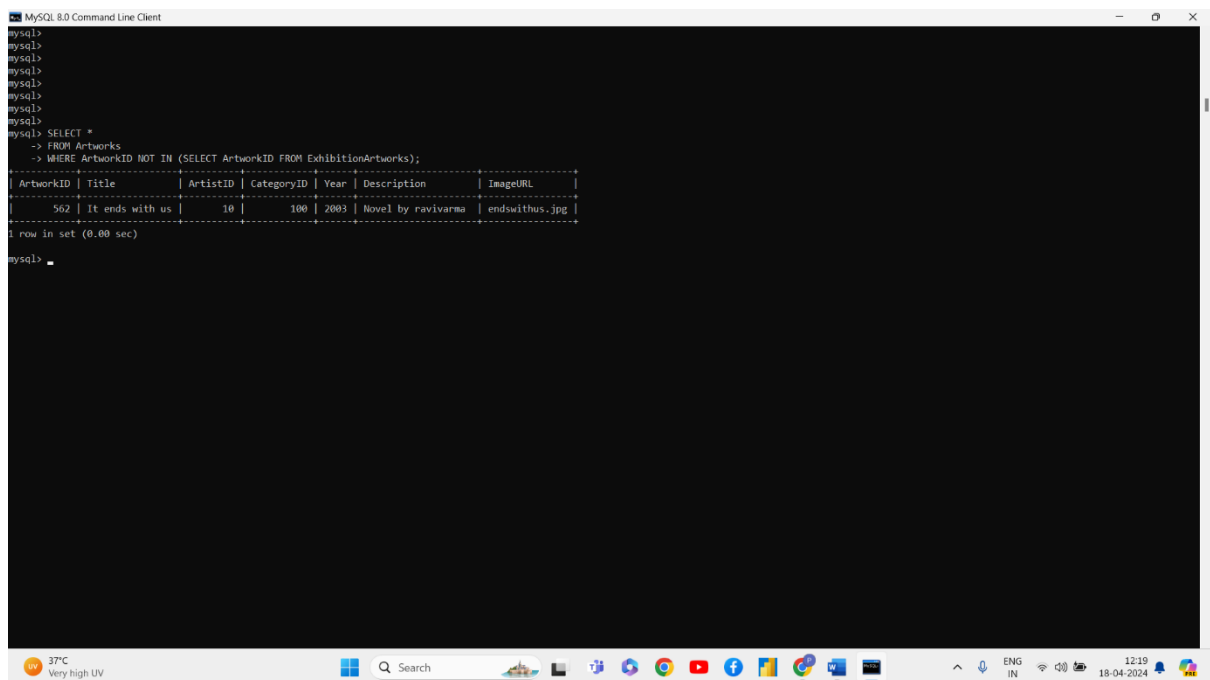


```
mysql> SELECT e.Title
-> FROM Exhibitions e
-> JOIN ExhibitionArtworks ea ON e.ExhibitionID = ea.ExhibitionID
-> JOIN Artworks a ON ea.ArtworkID = a.ArtworkID
-> JOIN Artists ar ON a.ArtistID = ar.ArtistID
-> WHERE ar.Name IN ('Vincent van Gogh', 'Leonardo da Vinci')
-> GROUP BY e.ExhibitionID
-> HAVING COUNT(DISTINCT ar.Name) = 2;
+-----+
| title |
+-----+
| Modern Art Masterpieces |
+-----+
1 row in set (0.00 sec)

mysql>
```


11. Find all the artworks that have not been included in any exhibition.

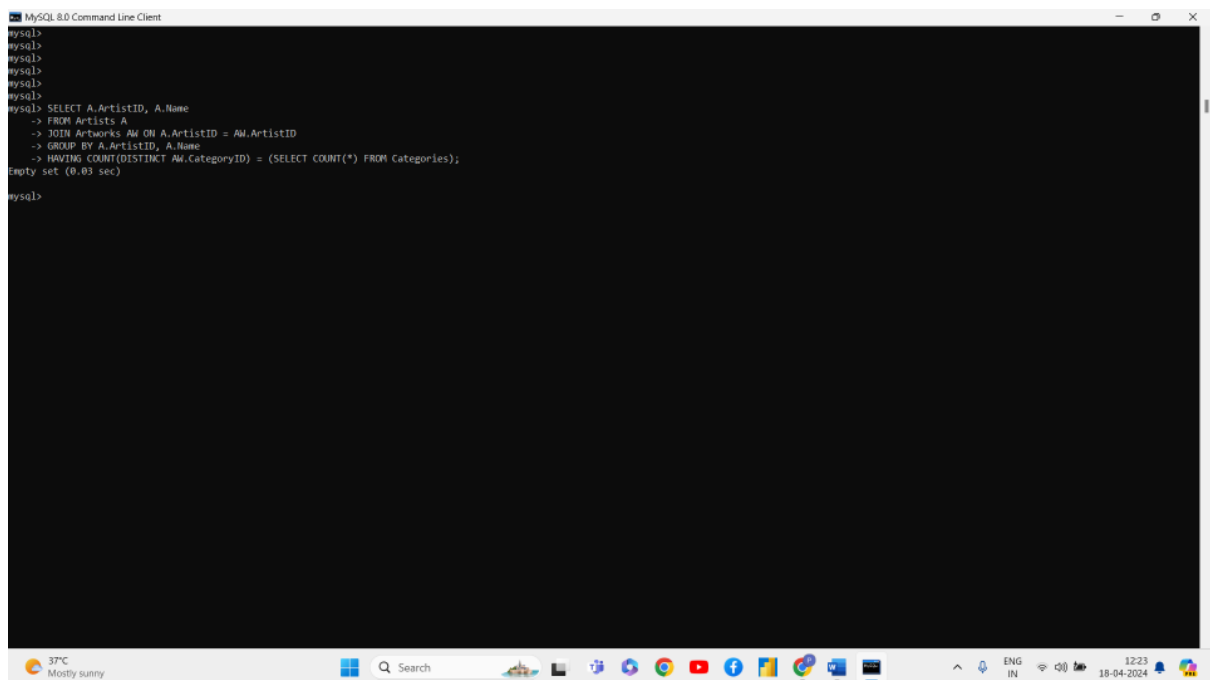
```
SELECT *  
FROM Artworks  
WHERE ArtworkID NOT IN (SELECT ArtworkID FROM ExhibitionArtworks);
```



```
mysql> SELECT *  
-> FROM Artworks  
-> WHERE ArtworkID NOT IN (SELECT ArtworkID FROM ExhibitionArtworks);  
+-----+-----+-----+-----+-----+-----+  
| ArtworkID | Title           | ArtistID | CategoryID | Year | Description           | ImageURL           |  
+-----+-----+-----+-----+-----+-----+  
| 562      | It ends with us | 10       | 100        | 2003 | Novel by ravivarma   | endswithus.jpg    |  
+-----+-----+-----+-----+-----+-----+  
1 row in set (0.00 sec)  
mysql>
```

12. List artists who have created artworks in all available categories.

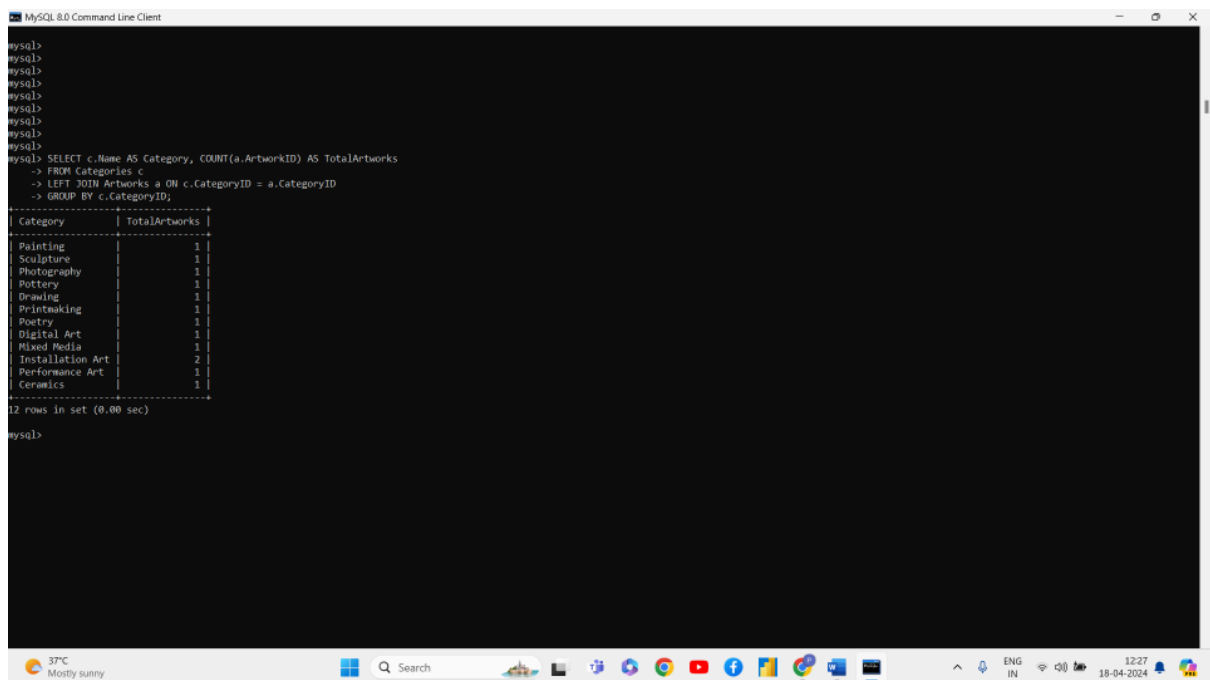
```
SELECT A.ArtistID, A.Name
FROM Artists A
JOIN Artworks AW ON A.ArtistID = AW.ArtistID
GROUP BY A.ArtistID, A.Name
HAVING COUNT(DISTINCT AW.CategoryID) = (SELECT COUNT(*) FROM Categories);
```



```
MySQL 8.0 Command Line Client
mysql>
mysql>
mysql>
mysql>
mysql> SELECT A.ArtistID, A.Name
mysql> -> FROM Artists A
mysql> -> JOIN Artworks AW ON A.ArtistID = AW.ArtistID
mysql> -> GROUP BY A.ArtistID, A.Name
mysql> -> HAVING COUNT(DISTINCT AW.CategoryID) = (SELECT COUNT(*) FROM Categories);
Empty set (0.03 sec)
mysql>
```

13. List the total number of artworks in each category.

```
SELECT c.Name AS Category, COUNT(a.ArtworkID) AS TotalArtworks
FROM Categories c
LEFT JOIN Artworks a ON c.CategoryID = a.CategoryID
GROUP BY c.CategoryID;
```



The screenshot shows a MySQL 8.0 Command Line Client window. The user has entered the following SQL query:

```
mysql> SELECT c.Name AS Category, COUNT(a.ArtworkID) AS TotalArtworks
mysql> -> FROM Categories c
mysql> -> LEFT JOIN Artworks a ON c.CategoryID = a.CategoryID
mysql> -> GROUP BY c.CategoryID;
```

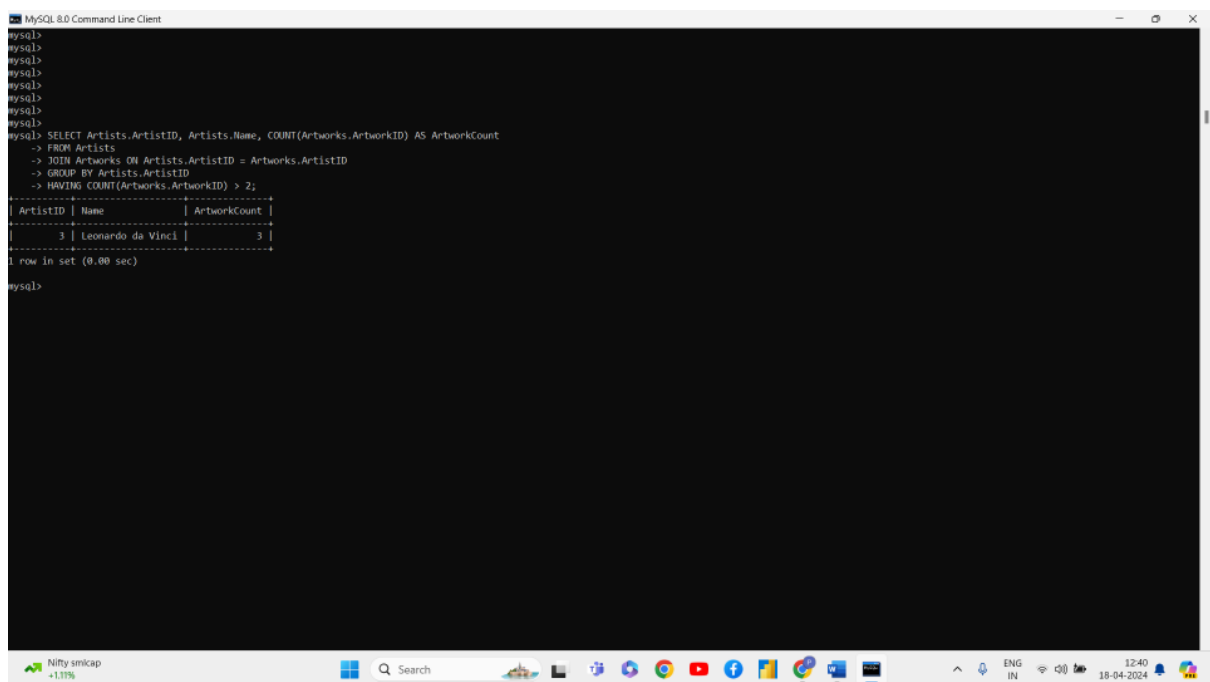
The results are displayed in a table format:

Category	TotalArtworks
Painting	1
Sculpture	1
Photography	1
Pottery	1
Drawing	1
Printmaking	1
Poetry	1
Digital Art	1
Mixed Media	1
Installation Art	2
Performance Art	1
Ceramics	1

Below the table, it says "12 rows in set (0.00 sec)". The window title is "MySQL 8.0 Command Line Client". The Windows taskbar at the bottom shows the date as 18-04-2024 and the time as 12:27.

14. Find the artists who have more than 2 artworks in the gallery.

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



The screenshot shows a MySQL Command Line Client window with the following text:

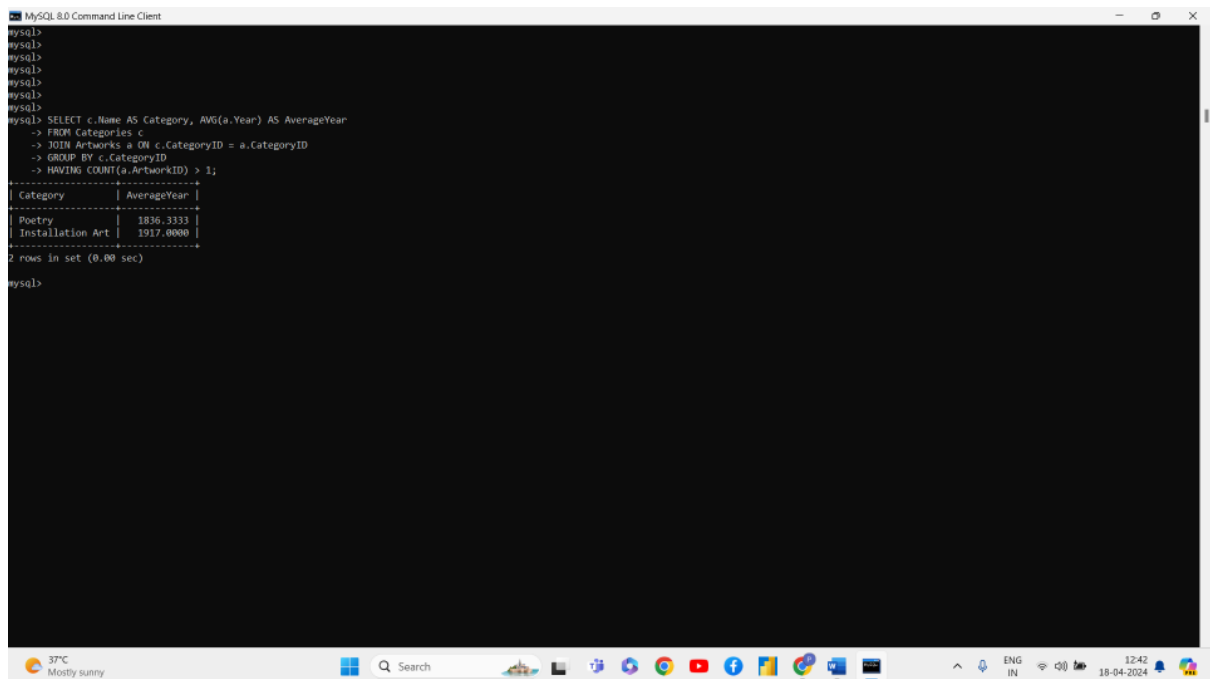
```
mysql>
mysql>
mysql>
mysql>
mysql>
mysql>
mysql> SELECT Artists.ArtistID, Artists.Name, COUNT(Artworks.ArtworkID) AS ArtworkCount
mysql>     -> FROM Artists
mysql>     -> JOIN Artworks ON Artists.ArtistID = Artworks.ArtistID
mysql>     -> GROUP BY Artists.ArtistID
mysql>     -> HAVING COUNT(Artworks.ArtworkID) > 2;
+-----+-----+-----+
| ArtistID | Name           | ArtworkCount |
+-----+-----+-----+
| 3        | Leonardo da Vinci | 3            |
+-----+-----+-----+
1 row in set (0.00 sec)

mysql>
```

The results are displayed in a table with three columns: ArtistID, Name, and ArtworkCount. The first row shows ArtistID 3, Name Leonardo da Vinci, and ArtworkCount 3. The window also shows a Windows taskbar at the bottom with various icons and the system clock.

15. List the categories with the average year of artworks they contain, only for categories with more than 1 artwork.

```
SELECT c.Name AS Category, AVG(a.Year) AS AverageYear
FROM Categories c
JOIN Artworks a ON c.CategoryID = a.CategoryID
GROUP BY c.CategoryID
HAVING COUNT(a.ArtworkID) > 1;
```



The screenshot shows a MySQL Command Line Client window. The user has entered the following SQL query:

```
mysql> SELECT c.Name AS Category, AVG(a.Year) AS AverageYear
mysql> -> FROM Categories c
mysql> -> JOIN Artworks a ON c.CategoryID = a.CategoryID
mysql> -> GROUP BY c.CategoryID
mysql> -> HAVING COUNT(a.ArtworkID) > 1;
```

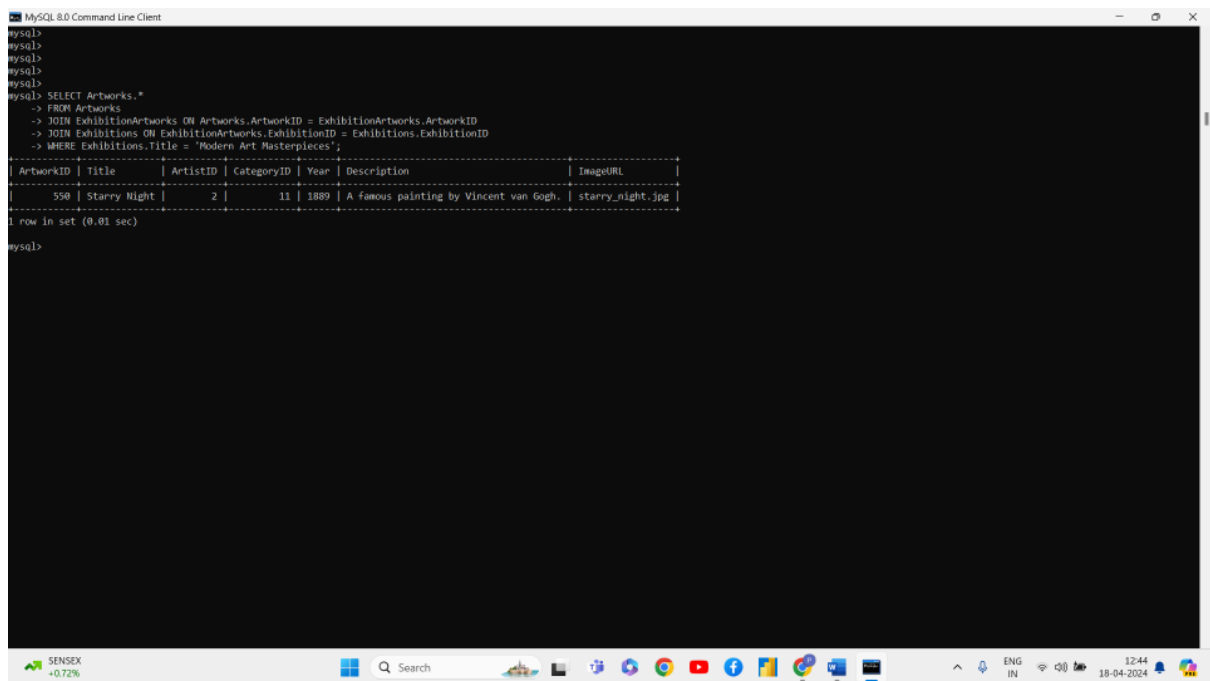
The results are displayed in a table format:

Category	AverageYear
Poetry	1836.3333
Installation Art	1917.0000

Below the table, it says "2 rows in set (0.00 sec)". The window also shows the Windows taskbar at the bottom with the date 18-04-2024 and time 12:42.

16. Find the artworks that were exhibited in the 'Modern Art Masterpieces' exhibition.

```
SELECT Artworks.*  
FROM Artworks  
JOIN ExhibitionArtworks ON Artworks.ArtworkID = ExhibitionArtworks.ArtworkID  
JOIN Exhibitions ON ExhibitionArtworks.ExhibitionID = Exhibitions.ExhibitionID  
WHERE Exhibitions.Title = 'Modern Art Masterpieces';
```



The screenshot shows a MySQL Command Line Client window with the following text:

```
mysql>  
mysql>  
mysql>  
mysql>  
mysql> SELECT Artworks.*  
-> FROM Artworks  
-> JOIN ExhibitionArtworks ON Artworks.ArtworkID = ExhibitionArtworks.ArtworkID  
-> JOIN Exhibitions ON ExhibitionArtworks.ExhibitionID = Exhibitions.ExhibitionID  
-> WHERE Exhibitions.Title = 'Modern Art Masterpieces';
```

ArtworkID	Title	ArtistID	CategoryID	Year	Description	ImageURL
558	Starry Night	2	11	1889	A famous painting by Vincent van Gogh.	starry_night.jpg

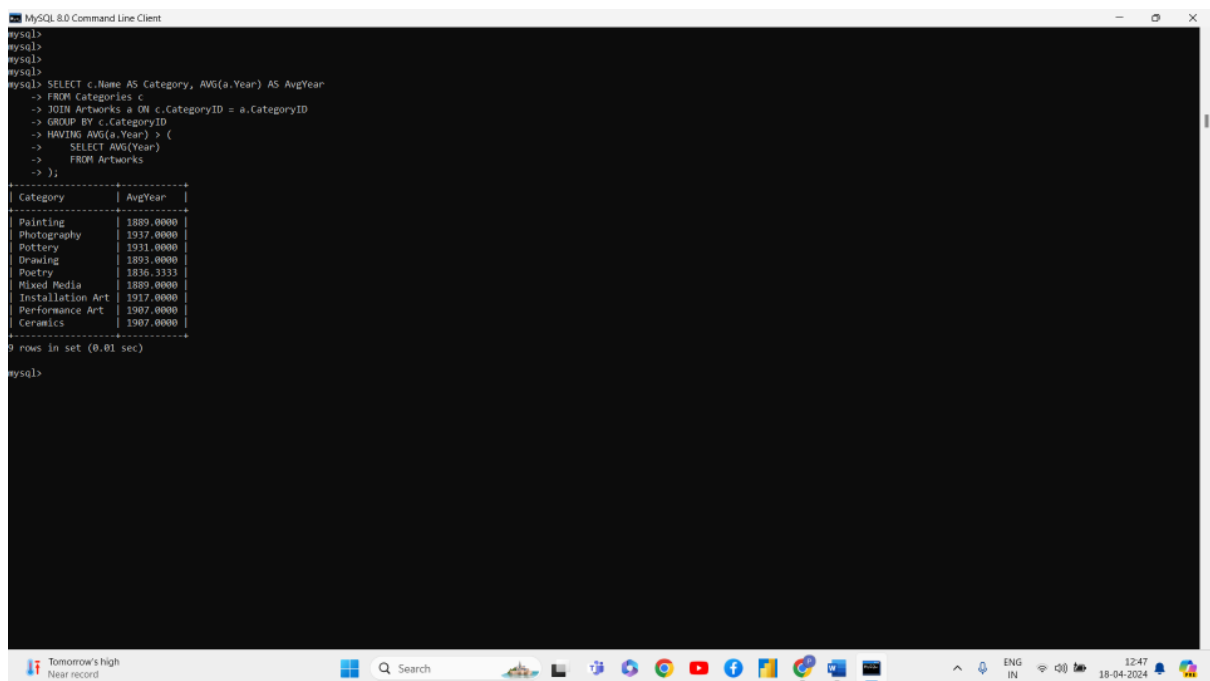
1 row in set (0.01 sec)

```
mysql>
```

The window also shows a Windows taskbar at the bottom with various icons and system information.

17. Find the categories where the average year of artworks is greater than the average year of all artworks.

```
SELECT c.Name AS Category, AVG(a.Year) AS AvgYear
FROM Categories c
JOIN Artworks a ON c.CategoryID = a.CategoryID
GROUP BY c.CategoryID
HAVING AVG(a.Year) > (
    SELECT AVG(Year)
    FROM Artworks );
```



The screenshot shows a MySQL 8.0 Command Line Client window. The user has entered a SQL query to find categories where the average year of artworks is greater than the average year of all artworks. The query is as follows:

```
mysql> SELECT c.Name AS Category, AVG(a.Year) AS AvgYear
mysql> FROM Categories c
mysql> JOIN Artworks a ON c.CategoryID = a.CategoryID
mysql> GROUP BY c.CategoryID
mysql> HAVING AVG(a.Year) > (
mysql>     SELECT AVG(Year)
mysql>     FROM Artworks
mysql> );
```

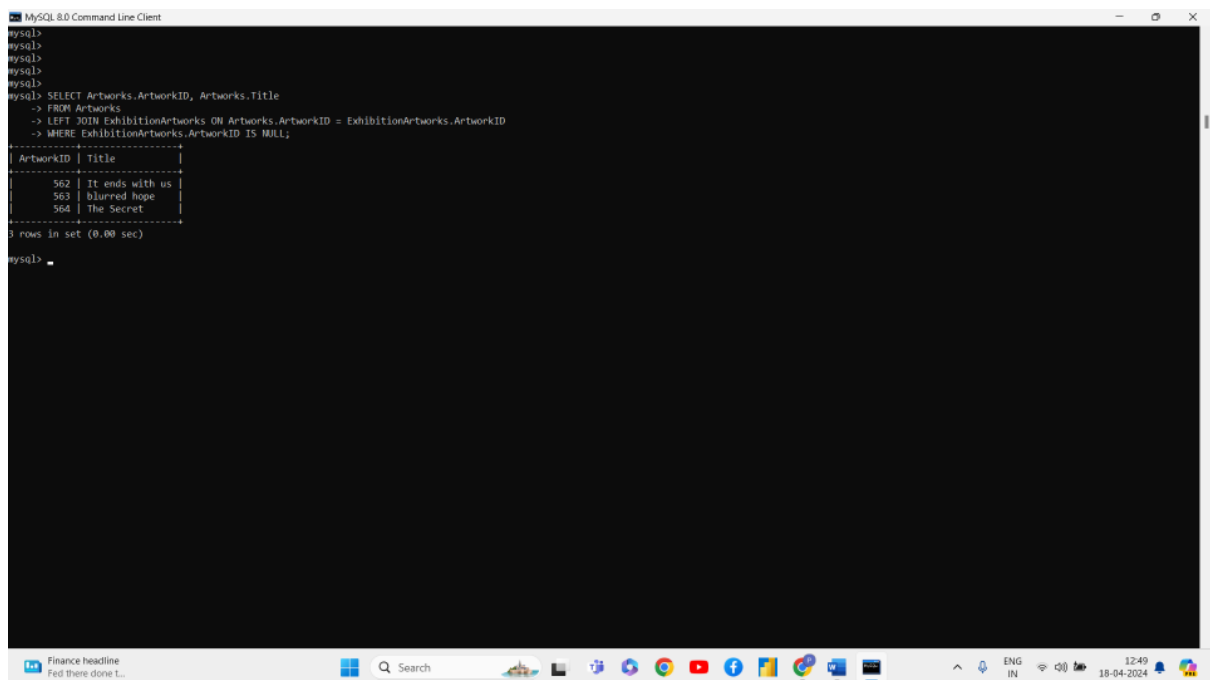
The results are displayed in a table with two columns: Category and AvgYear. The table contains 10 rows of data, representing different art categories and their average years.

Category	AvgYear
Painting	1889.0000
Photography	1937.0000
Pottery	1931.0000
Drawing	1893.0000
Poetry	1836.3333
Mixed Media	1889.0000
Installation Art	1917.0000
Performance Art	1967.0000
Ceramics	1907.0000

10 rows in set (0.01 sec)

18. List the artworks that were not exhibited in any exhibition.

```
SELECT Artworks.ArtworkID, Artworks.Title
FROM Artworks
LEFT JOIN ExhibitionArtworks ON Artworks.ArtworkID = ExhibitionArtworks.ArtworkID
WHERE ExhibitionArtworks.ArtworkID IS NULL;
```

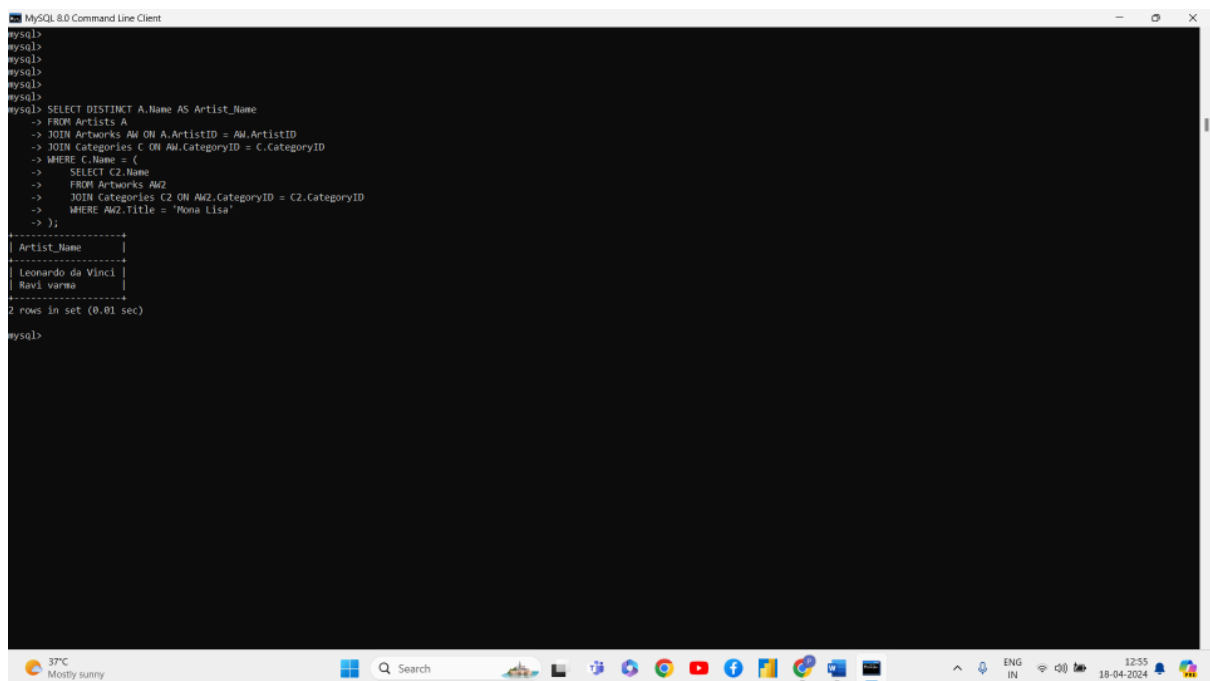


```
mysql> SELECT Artworks.ArtworkID, Artworks.Title
mysql> FROM Artworks
mysql> LEFT JOIN ExhibitionArtworks ON Artworks.ArtworkID = ExhibitionArtworks.ArtworkID
mysql> WHERE ExhibitionArtworks.ArtworkID IS NULL;
+-----+-----+
| ArtworkID | Title          |
+-----+-----+
| 562       | It ends with us |
| 563       | blurred hope   |
| 564       | The Secret     |
+-----+-----+
3 rows in set (0.00 sec)

mysql>
```


19. Show artists who have artworks in the same category as "Mona Lisa."

```
SELECT DISTINCT A.Name AS Artist_Name
FROM Artists A
JOIN Artworks AW ON A.ArtistID = AW.ArtistID
JOIN Categories C ON AW.CategoryID = C.CategoryID
WHERE C.Name = (
    SELECT C2.Name
    FROM Artworks AW2
    JOIN Categories C2 ON AW2.CategoryID = C2.CategoryID
    WHERE AW2.Title = 'Mona Lisa');
```



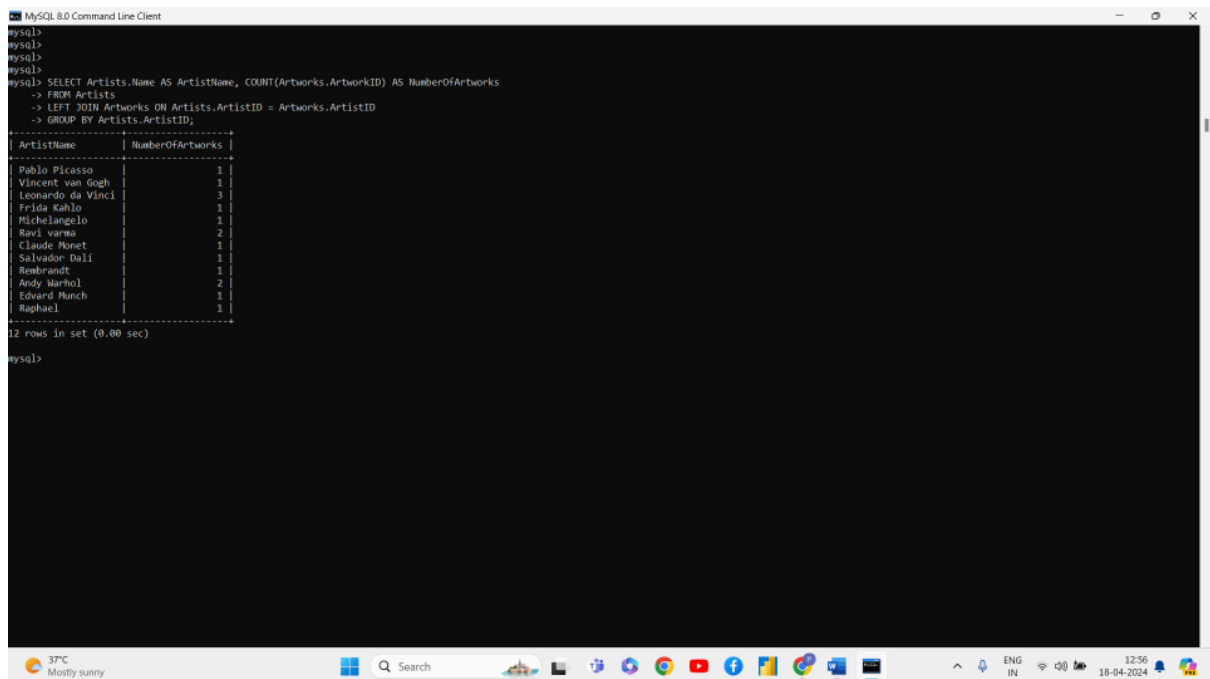
The screenshot shows a MySQL 8.0 Command Line Client window. The user has entered a complex SQL query to find artists who have artworks in the same category as the 'Mona Lisa'. The query uses nested subqueries and joins. The output shows two rows: Leonardo da Vinci and Ravi varma.

```
mysql>
mysql>
mysql>
mysql>
mysql> SELECT DISTINCT A.Name AS Artist_Name
mysql> -> FROM Artists A
mysql> -> JOIN Artworks AW ON A.ArtistID = AW.ArtistID
mysql> -> JOIN Categories C ON AW.CategoryID = C.CategoryID
mysql> -> WHERE C.Name = (
mysql> -> SELECT C2.Name
mysql> -> FROM Artworks AW2
mysql> -> JOIN Categories C2 ON AW2.CategoryID = C2.CategoryID
mysql> -> WHERE AW2.Title = 'Mona Lisa'
mysql> -> );
+-----+
| Artist_Name |
+-----+
| Leonardo da Vinci |
| Ravi varma |
+-----+
2 rows in set (0.01 sec)

mysql>
```

20. List the names of artists and the number of artworks they have in the gallery.

```
SELECT Artists.Name AS ArtistName, COUNT(Artworks.ArtworkID) AS NumberOfArtworks
FROM Artists
LEFT JOIN Artworks ON Artists.ArtistID = Artworks.ArtistID
GROUP BY Artists.ArtistID;
```



The screenshot shows a MySQL Command Line Client window with the following text:

```
mysql>
mysql>
mysql>
mysql> SELECT Artists.Name AS ArtistName, COUNT(Artworks.ArtworkID) AS NumberOfArtworks
mysql> -> FROM Artists
mysql> -> LEFT JOIN Artworks ON Artists.ArtistID = Artworks.ArtistID
mysql> -> GROUP BY Artists.ArtistID;
```

ArtistName	NumberOfArtworks
Pablo Picasso	1
Vincent van Gogh	1
Leonardo da Vinci	3
Frida Kahlo	1
Michelangelo	1
Ravi varma	2
Claude Monet	1
Salvador Dali	1
Rembrandt	1
Andy Warhol	2
Edvard Munch	1
Raphael	1

12 rows in set (0.00 sec)

```
mysql>
```

The window also shows a Windows taskbar at the bottom with a weather widget (37°C, Mostly sunny), a search bar, and various application icons. The system clock shows 12:56 on 18-04-2024.