

-- Create database

```
CREATE DATABASE ArtGalleryDB;
```

-- Use the database

```
USE ArtGalleryDB;
```

-- Table to store artist information

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

-- Table to store artwork information

```
CREATE TABLE Artworks (  
    ArtworkID INT AUTO_INCREMENT PRIMARY KEY,  
    Title VARCHAR(255) NOT NULL,  
    ArtistID INT,  
    YearCreated INT,  
    Medium VARCHAR(100),  
    Dimensions VARCHAR(100),  
    Price DECIMAL(10, 2),  
    FOREIGN KEY (ArtistID) REFERENCES Artists(ArtistID)  
);
```

-- Table to store exhibition information

```
CREATE TABLE Exhibitions (  
    ExhibitionID INT AUTO_INCREMENT PRIMARY KEY,
```

```
ExhibitionName VARCHAR(255) NOT NULL,  
StartDate DATE NOT NULL,  
EndDate DATE NOT NULL,  
Location VARCHAR(255)  
);
```

-- Table to store artwork included in exhibitions

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

-- Table to store sales information

```
CREATE TABLE Sales (  
    SaleID INT AUTO_INCREMENT PRIMARY KEY,  
    ArtworkID INT,  
    SaleDate DATE NOT NULL,  
    SalePrice DECIMAL(10, 2) NOT NULL,  
    FOREIGN KEY (ArtworkID) REFERENCES Artworks(ArtworkID)  
);
```

-- Example Inserts into Artists table

```
INSERT INTO Artists (ArtistName, BirthYear, Nationality, Biography) VALUES  
(  
'Vincent van Gogh', 1853, 'Dutch', 'Post-Impressionist painter known for works like Starry Night.'),  
(  
'Pablo Picasso', 1881, 'Spanish', 'Pioneering Cubist and influential 20th-century artist.'),  
(  
'Frida Kahlo', 1907, 'Mexican', 'Surrealist painter known for self-portraits and folk art.');
```

-- Example Inserts into Artworks table

```
INSERT INTO Artworks (Title, ArtistID, YearCreated, Medium, Dimensions, Price) VALUES
('Starry Night', 1, 1889, 'Oil on Canvas', '73.7 cm x 92.1 cm', 10000000.00),
('Guernica', 2, 1937, 'Oil on Canvas', '349 cm x 776 cm', 20000000.00),
('The Two Fridas', 3, 1939, 'Oil on Canvas', '173.5 cm x 173 cm', 5000000.00);
```

-- Example Inserts into Exhibitions table

```
INSERT INTO Exhibitions (ExhibitionName, StartDate, EndDate, Location) VALUES
('Impressionist Masters', '2024-05-01', '2024-08-31', 'Metropolitan Museum of Art'),
('Modern Art Revolution', '2024-06-15', '2024-09-30', 'Museum of Modern Art');
```

-- Example Inserts into ExhibitionArtworks table

```
INSERT INTO ExhibitionArtworks (ExhibitionID, ArtworkID) VALUES
(1, 1), -- Starry Night in Impressionist Masters
(2, 2), -- Guernica in Modern Art Revolution
(2, 3); -- The Two Fridas in Modern Art Revolution
```

-- Example Inserts into Sales table

```
INSERT INTO Sales (ArtworkID, SaleDate, SalePrice) VALUES
(1, '2024-08-10', 12000000.00), -- Starry Night sold
(3, '2024-08-15', 5500000.00); -- The Two Fridas sold

INSERT INTO Artists (ArtistName, BirthYear, Nationality, Biography)
VALUES ('Georgia O'Keeffe', 1887, 'American', 'Modernist artist known for large-scale flower
paintings.');
```

```
INSERT INTO Exhibitions (ExhibitionName, StartDate, EndDate, Location)
VALUES ('Abstract Expressionism', '2024-10-01', '2024-12-31', 'Guggenheim Museum');

INSERT INTO Artworks (Title, ArtistID, YearCreated, Medium, Dimensions, Price)
VALUES ('Black Iris III', 4, 1926, 'Oil on Canvas', '101.6 cm x 127 cm', 7000000.00);

INSERT INTO ExhibitionArtworks (ExhibitionID, ArtworkID)
```

```
VALUES (3, 4); -- Black Iris III in Abstract Expressionism
INSERT INTO Sales (ArtworkID, SaleDate, SalePrice)
VALUES (4, '2024-08-20', 7500000.00); -- Black Iris III sold
SELECT * FROM Artists;
SELECT a.ArtworkID, a.Title, ar.ArtistName, a.YearCreated, a.Medium, a.Dimensions, a.Price
FROM Artworks a
JOIN Artists ar ON a.ArtistID = ar.ArtistID;
SELECT * FROM Exhibitions;
SELECT e.ExhibitionName, a.Title, ar.ArtistName
FROM ExhibitionArtworks ea
JOIN Exhibitions e ON ea.ExhibitionID = e.ExhibitionID
JOIN Artworks a ON ea.ArtworkID = a.ArtworkID
JOIN Artists ar ON a.ArtistID = ar.ArtistID
WHERE e.ExhibitionID = 1; -- For exhibition with ID 1
SELECT a.Title, s.SaleDate, s.SalePrice
FROM Sales s
JOIN Artworks a ON s.ArtworkID = a.ArtworkID
WHERE a.ArtworkID = 1; -- For artwork with ID 1
```