

## CSC 174 Spring 2024

### Assignment 3

Ahmed Taaha

#### Creat tables screenshots

##### artist

```
[mysql>
mysql> create table artist (
    -> aname varchar(50) primary key,
    -> date_born date,
    -> date_died date,
    -> description varchar(255),
    -> country_of_origin varchar(20)
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql> █
```

##### art\_object

```
mysql>
mysql> create table art_object(
    -> id_no integer primary key,
    -> year integer,
    -> title varchar(50),
    -> description varchar(255),
    -> artist_name varchar(50),
    -> foreign key (artist_name) references artist(aname)
    -> );
Query OK, 0 rows affected (0.02 sec)
```

##### others

```
mysql> create table others(
    -> id_no integer primary key,
    -> type varchar(20),
    -> style varchar(20),
    -> foreign key (id_no) references art_object(id_no)
    -> );
Query OK, 0 rows affected (0.01 sec)

mysql> █
```

### **painting**

```
mysql> create table painting(  
-> id_no integer primary key,  
-> type varchar(20),  
-> style varchar(20),  
-> drawn_on varchar(20),  
-> foreign key(id_no) references art_object(id_no)  
[ -> );  
Query OK, 0 rows affected (0.03 sec)
```

### **sculpture**

```
mysql> create table sculpture (  
-> id_no integer primary key,  
-> material varchar(20),  
-> weight double,  
-> height double,  
-> foreign key(id_no) references art_object(id_no)  
[ -> );  
Query OK, 0 rows affected (0.01 sec)
```

### **exhibition**

```
mysql> create table exhibition (  
-> ename varchar(60) primary key,  
-> start_date date,  
-> end_date date  
[ -> );  
Query OK, 0 rows affected (0.02 sec)
```

### **shown\_at**

```
mysql> create table shown_at(  
-> art int,  
-> exhibition_name varchar(60),  
-> primary key(art, exhibition_name),  
-> foreign key(art) references art_object(id_no),  
-> foreign key (exhibition_name) references exhibition(ename)  
-> );  
Query OK, 0 rows affected (0.03 sec)
```

## Insert into tables queries screenshot

### Insert into artist table

```
mysql> INSERT INTO artist
-> (aname, date_born, date_died, description, country_of_origin)
-> VALUES('Leonardo da Vinci', '1452-04-15', '1519-05-02', 'An Italian polymath of the High Renaissance who was active as a painter, draughtsman, engineer, scientist, theorist, sculptor, and architect', 'Italy');
Query OK, 1 row affected (0.00 sec)

mysql>

mysql> INSERT INTO artist
-> (aname, date_born, date_died, description, country_of_origin)
-> VALUES('Vincent van Gogh', '1853-03-30', '1890-07-29', 'A Dutch Post-Impressionist painter who is among the most famous and influential figures in the history of Western art', 'France');
Query OK, 1 row affected (0.00 sec)

mysql>

mysql> INSERT INTO artist
-> (aname, date_born, date_died, description, country_of_origin)
-> VALUES('Raphael', '1483-01-01', '1520-04-06', 'An Italian painter and architect of the High Renaissance', 'Italy');
Query OK, 1 row affected (0.00 sec)

mysql>

mysql> INSERT INTO artist
-> (aname, date_born, date_died, description, country_of_origin)
-> VALUES('Michelangelo', '1475-03-06', '1564-02-18', 'An Italian sculptor, painter, architect, and poet of the High Renaissance', 'Republic of Florence');
Query OK, 1 row affected (0.00 sec)

mysql>

mysql> INSERT INTO artist
-> (aname, date_born, date_died, description, country_of_origin)
-> VALUES('Claude Monet', '1840-11-14', '1926-12-05', 'French painter and founder of impressionist painting', 'France');
Query OK, 1 row affected (0.00 sec)

mysql>

mysql> INSERT INTO artist
-> (aname, date_born, date_died, description, country_of_origin)
-> VALUES('Louise Bourgeois', '1911-12-25', '2010-05-31', 'French-American artist', 'France');
Query OK, 1 row affected (0.00 sec)

mysql>

mysql> INSERT INTO artist
-> (aname, date_born, date_died, description, country_of_origin)
-> VALUES('John Doe', '1840-11-14', '1926-12-05', 'French painter and founder of impressionist painting', 'France');
Query OK, 1 row affected (0.00 sec)

mysql>

mysql> INSERT INTO artist
-> (aname, date_born, date_died, description, country_of_origin)
-> VALUES('John Smith', '1911-12-25', '2010-05-31', 'French-American artist', 'France');
Query OK, 1 row affected (0.00 sec)

mysql>
```

### Insert into art\_object table

```
mysql> INSERT INTO art_object
-> (id_no, 'year', title, description, artist_name)
-> VALUES(1, 1505, 'Mona Lisa', 'The Mona Lisa is a half-length portrait painting by Italian artist Leonardo da Vinci', 'Leonardo da Vinci');
Query OK, 1 row affected (0.00 sec)

mysql>

mysql> INSERT INTO art_object
-> (id_no, 'year', title, description, artist_name)
-> VALUES(2, 1889, 'The Starry Night', 'The Starry Night is an oil-on-canvas painting by the Dutch Post-Impressionist painter Vincent van Gogh', 'Vincent van Gogh');
Query OK, 1 row affected (0.00 sec)

mysql>

mysql> INSERT INTO art_object
-> (id_no, 'year', title, description, artist_name)
-> VALUES(3, 1511, 'The School of Athens', 'The School of Athens is a fresco by the Italian Renaissance artist Raphael', 'Raphael');
Query OK, 1 row affected (0.01 sec)

mysql>

mysql> INSERT INTO art_object
-> (id_no, 'year', title, description, artist_name)
-> VALUES(4, 1504, 'David of Michelangelo', 'David is a masterpiece of Italian Renaissance sculpture Michelangelo', 'Michelangelo');
Query OK, 1 row affected (0.00 sec)

mysql>
```

```
mysql> INSERT INTO art_object
-> (id_no, `year`, title, description, artist_name)
[ -> VALUES(5, 1872, 'Impression, Sunrise', 'Impression, Sunrise is an 1872 painting by Claude Monet', 'Claude Monet');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```

```
mysql> INSERT INTO art_object
-> (id_no, `year`, title, description, artist_name)
[ -> VALUES(6, 1504, 'Madonna of Bruges', 'A marble sculpture by Michelangelo of the Virgin and Child.', 'Michelangelo');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```

```
mysql> INSERT INTO art_object
-> (id_no, `year`, title, description, artist_name)
[ -> VALUES(7, 1495, 'Angel', 'A statue of an angel', 'Michelangelo');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO art_object
-> (id_no, `year`, title, description, artist_name)
[ -> VALUES(8, 1996, 'Spider', 'Spider is a sculpture by Louise Bourgeois', 'Louise Bourgeois');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```

```
mysql> INSERT INTO art_object
-> (id_no, `year`, title, description, artist_name)
[ -> VALUES(9, 1872, 'Paiting 1', 'Sunrise painting', 'John Doe');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```

```
mysql> INSERT INTO art_object
-> (id_no, `year`, title, description, artist_name)
[ -> VALUES(10, 1504, 'Paiting 2', 'Sunset painting', 'John Doe');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```

```
mysql> INSERT INTO art_object
-> (id_no, `year`, title, description, artist_name)
[ -> VALUES(11, 1495, 'Shining Stars', 'Shining stars on dessert', 'John Smith');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO art_object
-> (id_no, `year`, title, description, artist_name)
[ -> VALUES(12, 1996, 'Paiting', 'A hezard of ships in snow', 'John Smith');
Query OK, 1 row affected (0.00 sec)
```

### Insert into painting table

```
mysql> INSERT INTO painting
-> (id_no, `type`, `style`, drawn_on)
[ -> VALUES(1, 'portrait', 'half-length portrait', '1503-01-01');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO painting
      -> (id_no, `type`, `style`, drawn_on)
[      -> VALUES(2, 'oil-on-canvas', 'east facing window', '1889-06-01');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```

---

```
mysql> INSERT INTO painting
      -> (id_no, `type`, `style`, drawn_on)
[      -> VALUES(5, 'painting', 'sunrise of port', '1872-01-01');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```

```
mysql> INSERT INTO painting
      -> (id_no, `type`, `style`, drawn_on)
[      -> VALUES(9, 'portrait', 'style 1', '1503-01-01');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> █
```

```
mysql> INSERT INTO painting
      -> (id_no, `type`, `style`, drawn_on)
[      -> VALUES(10, 'oil-on-canvas', 'style 2', '1889-06-01');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```

---

```
mysql> INSERT INTO painting
      -> (id_no, `type`, `style`, drawn_on)
[      -> VALUES(11, 'portrait', 'style 3', '1503-01-01');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> █
```

---

```
mysql> INSERT INTO painting
      -> (id_no, `type`, `style`, drawn_on)
[      -> VALUES(12, 'oil-on-canvas', 'style 4', '1889-06-01');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```

---



### Insert into others table

```
mysql> INSERT INTO others
      -> (id_no, `type`, `style`)
[      -> VALUES(3, 'history', 'room view');
Query OK, 1 row affected (0.01 sec)

mysql> █
```

### Insert into sculpture table

```
mysql> INSERT INTO sculpture
      -> (id_no, material, weight, height)
[      -> VALUES(4, 'white marble', 6, 17);
Query OK, 1 row affected (0.00 sec)

mysql> █
```

```
mysql> INSERT INTO sculpture
      -> (id_no, material, weight, height)
[      -> VALUES(6, 'bronze and silver', 3, 15);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```

```
mysql> INSERT INTO sculpture
      -> (id_no, material, weight, height)
[      -> VALUES(7, 'Marble', 6, 4);
Query OK, 1 row affected (0.01 sec)

mysql> █
```

```
mysql> INSERT INTO sculpture
      -> (id_no, material, weight, height)
[      -> VALUES(8, 'Marble', 2.5, 1.6);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```

### insert into exhibition table

```
mysql> INSERT INTO exhibition
      -> (ename, start_date, end_date)
[      -> VALUES('E1', '2015-09-14', '2016-02-07');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> █
```

```
mysql> INSERT INTO exhibition
      -> (ename, start_date, end_date)
[      -> VALUES('E2', '2015-11-01', '2016-03-06');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```

#### Insert into shown\_at table

```
mysql> INSERT INTO shown_at
      -> (art, exhibition_name)
[      -> VALUES(4, 'E1');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```

```
mysql> INSERT INTO shown_at
      -> (art, exhibition_name)
[      -> VALUES(1, 'E1');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```

```
mysql> INSERT INTO shown_at
      -> (art, exhibition_name)
[      -> VALUES(6, 'E1');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```

```
mysql> INSERT INTO shown_at
      -> (art, exhibition_name)
[      -> VALUES(7, 'E1');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```

```
mysql> INSERT INTO shown_at
      -> (art, exhibition_name)
[      -> VALUES(12, 'E1');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> █
```

```
mysql> INSERT INTO shown_at
      -> (art, exhibition_name)
[      -> VALUES(8, 'E1');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO shown_at
      -> (art, exhibition_name)
[      -> VALUES(2, 'E2');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO shown_at
      -> (art, exhibition_name)
[      -> VALUES(3, 'E2');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO shown_at
      -> (art, exhibition_name)
[      -> VALUES(5, 'E2');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```

```
mysql> INSERT INTO shown_at
      -> (art, exhibition_name)
[      -> VALUES(11, 'E2');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> █
```

```
mysql> INSERT INTO shown_at
      -> (art, exhibition_name)
[      -> VALUES(10, 'E2');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```

```
mysql> INSERT INTO shown_at
      -> (art, exhibition_name)
[      -> VALUES(9, 'E1');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> █
```



### Create artist\_no\_of\_sculptures view screenshot

```
mysql> create or replace view artist_no_of_sculpture as
-> select a.aname "artist_name", count(a.aname) "no_of_sculpture" from sculpture s, artist a, art_object ao
-> where s.id_no = ao.id_no and ao.artist_name = a.aname
-> GROUP by a.aname
-> HAVING count(a.aname) > 2;
Query OK, 0 rows affected (0.00 sec)

mysql>
```

### Result of artist\_no\_of\_sculptures view screenshot

```
[mysql> select * from artist_no_of_sculpture;
+-----+-----+
| artist_name | no_of_sculpture |
+-----+-----+
| Michelangelo | 3 |
+-----+-----+
1 row in set (0.00 sec)

mysql>
```

### Create No\_of\_painting\_exhibited function screenshot

```
mysql> DELIMITER $$
mysql> CREATE FUNCTION
-> No_of_painting_exhibited(exhibition_name varchar(60)) returns int
-> DETERMINISTIC
-> BEGIN
-> declare no_of_paintings int;
-> select count(sa.art) into no_of_paintings from shown_at sa , exhibition e, painting p
-> where e.ename = sa.exhibition_name and e.ename=exhibition_name and sa.art = p.id_no
-> GROUP by e.ename;
-> return (no_of_paintings);
-> end $$
Query OK, 0 rows affected (0.00 sec)

mysql> DELIMITER ;
[mysql>
mysql>
```

### Result of No\_of\_painting\_exhibited function screenshot

```
mysql> select e.ename, e.start_date, e.end_date, No_of_painting_exhibited("E1") from exhibition e
-> where e.ename = "E1";
+-----+-----+-----+-----+
| ename | start_date | end_date | No_of_painting_exhibited("E1") |
+-----+-----+-----+-----+
| E1 | 2015-09-14 | 2016-02-07 | 3 |
+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql>

mysql> select e.ename, e.start_date, e.end_date, No_of_painting_exhibited("E2") from exhibition e
-> where e.ename = "E2";
+-----+-----+-----+-----+
| ename | start_date | end_date | No_of_painting_exhibited("E2") |
+-----+-----+-----+-----+
| E2 | 2015-11-01 | 2016-03-06 | 4 |
+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql>
```

## Create procedure paintings\_sp screenshot

```
mysql> DELIMITER $$
mysql> create procedure
-> paintings_sp (
-> in exhibition_name varchar(60),
-> in artist_name varchar(30))
-> BEGIN
-> select a.aname , ao.description, p.`style` ,e.ename from exhibition e , painting p , artist a , shown_at sa , art_object ao
-> where e.ename = sa.exhibition_name and ao.artist_name = a.aname and sa.art = p.id_no and p.id_no = ao.id_no and e.ename = exhibition_name and a.aname = artist_name;
-> end $$
Query OK, 0 rows affected (0.02 sec)

mysql>
```

## Calling paintings\_sp procedure

```
mysql> call paintings_sp('E2', 'John Smith');
+-----+-----+-----+-----+
| aname      | description                | style  | ename |
+-----+-----+-----+-----+
| John Smith | Shining stars on dessert  | style 3 | E2    |
+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

Query OK, 0 rows affected (0.00 sec)

```
mysql>
```

```
[mysql> call paintings_sp('E1', 'John Doe');
+-----+-----+-----+-----+
| aname      | description                | style  | ename |
+-----+-----+-----+-----+
| John Doe   | Sunrise painting          | style 1 | E1    |
+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

Query OK, 0 rows affected (0.00 sec)

```
[mysql>
```

## Drop tables/views/functions/procedures queries screenshots

```
[mysql> drop procedure paintings_sp;
Query OK, 0 rows affected (0.00 sec)
```

```
mysql>
```

```
[mysql> drop function No_of_painting_exhibited;
Query OK, 0 rows affected (0.00 sec)
```

```
mysql>
```

```
[mysql> drop view artist_no_of_sculpture;  
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> █
```

```
mysql> drop table shown_at;  
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> █
```

```
[mysql> drop table exhibition;  
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> █
```

---

```
[mysql> drop table `others`;  
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> █
```

```
[mysql> drop table painting;  
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> █
```

```
[mysql> drop table sculpture;  
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> █
```

---

```
[mysql> drop table art_object;  
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> █
```

---

```
[mysql> drop table artist;  
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> █
```

---