



UNIVERSITY OF
TEXAS
ARLINGTON

Project Phase II

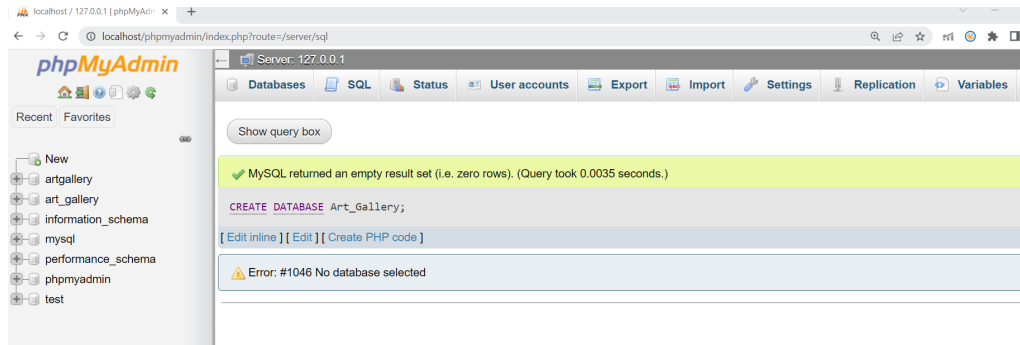
Database Implementation for Arlington Art Gallery

Sai Subhash Yalamadala - 1002031729

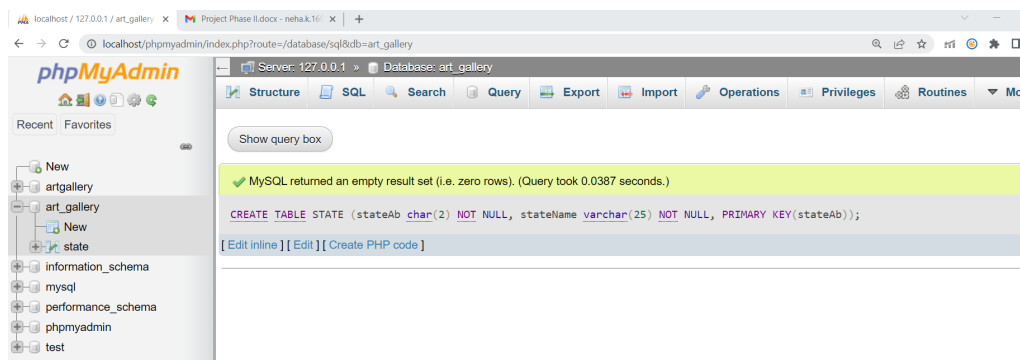
Akshitha Bojje - 1001880904

PART - 1

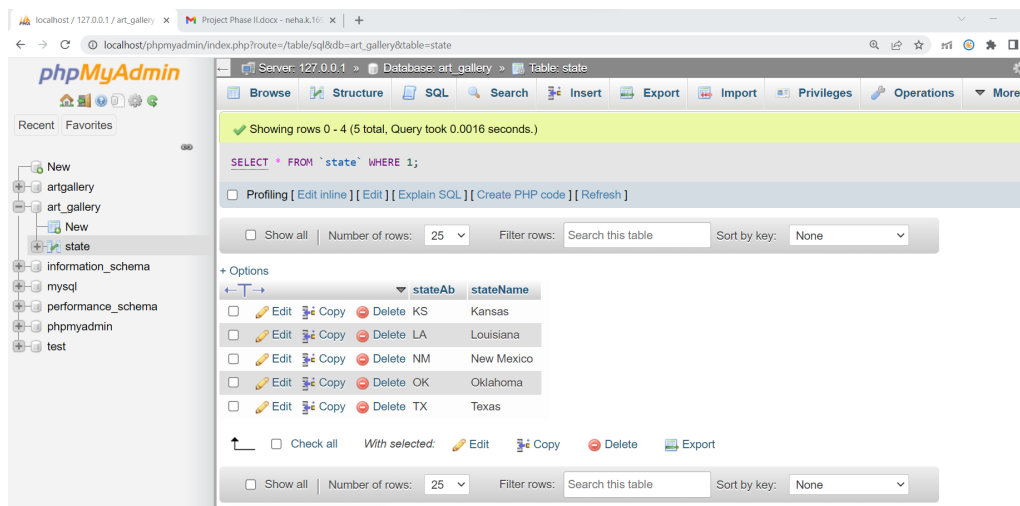
Art Gallery Database:



CREATE TABLE statement for STATE



Viewing STATE data using SELECT command



CREATE TABLE statement for ARTIST

The screenshot shows the phpMyAdmin interface with the 'art_gallery' database selected. The 'SQL' tab is active, displaying the following CREATE TABLE statement:

```
CREATE TABLE ARTIST(aID int(3) NOT NULL, name varchar(25) NOT NULL, birthdate DATE NOT NULL, deathDATE DATE , comission INT(3), street varchar(35), city varchar(20),stateAb char(2) NOT NULL, zipcode varchar(20), PRIMARY KEY(aID),FOREIGN KEY(stateAb) REFERENCES STATE(stateAb));
```

Below the query, there are links for '[Edit inline]', '[Edit]', and '[Create PHP code]'. A message at the top indicates: 'MySQL returned an empty result set (i.e. zero rows). (Query took 0.0539 seconds.)'

SELECT Statement for ARTIST

The screenshot shows the phpMyAdmin interface with the 'art_gallery' database selected. The 'Table: artist' is selected, and the 'SQL' tab is active. The query is:

```
SELECT * FROM `artist`
```

Below the query, there are links for '[Profiling]', '[Edit inline]', '[Edit]', '[Explain SQL]', '[Create PHP code]', and '[Refresh]'. A message at the top indicates: 'Showing rows 0 - 20 (21 total, Query took 0.0032 seconds.)'

Below the query, there are controls for 'Show all', 'Number of rows: 25', 'Filter rows: Search this table', and 'Sort by key: None'.

Below the controls, there is a table with 10 columns: aID, name, birthdate, deathDATE, comission, street, city, stateAb, and zipcode. The table contains 6 rows of data:

aID	name	birthdate	deathDATE	comission	street	city	stateAb	zipcode
1	Abed Abdi	2000-01-01	NULL		10 309 Hcounty Road	Abbott	TX	76621-0057
2	Ismail Gulc	1990-01-03	NULL		11 405 E Mesquite Street	Abbott	TX	76621-0057
3	Shakir Ali	1995-02-04	NULL		12 5000 Spectrum Street	Addison	TX	75001-6880
4	Abdur Rahman	1970-02-05	NULL		10 1000 County Road	Bradley	OK	73011-0121
5	Kalpada Ghoshal	1994-01-01	NULL		10 Boundary Road	Bradley	OK	73011-9600
6	Manishi Dey	1994-07-15	NULL		11 450 Main Street	Mound City	KS	66056-0001

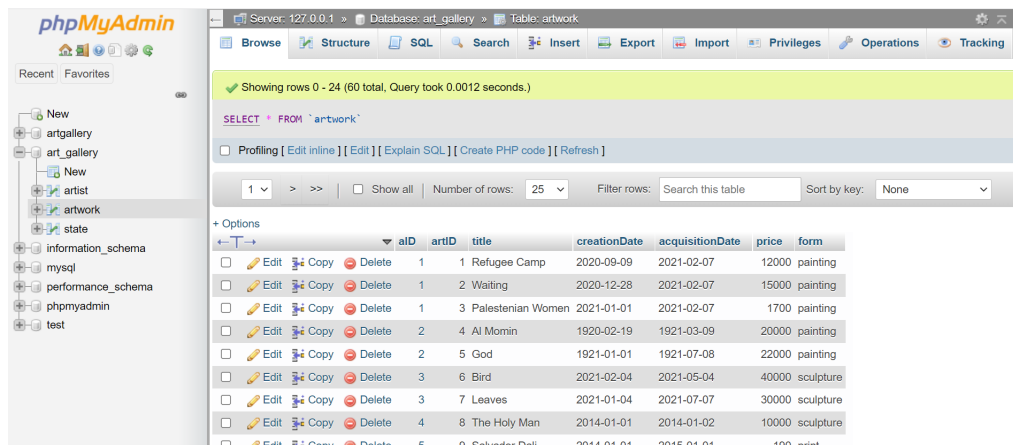
CREATE TABLE statement for ARTWORK

The screenshot shows the phpMyAdmin interface with the 'art_gallery' database selected. The 'SQL' tab is active, displaying the following CREATE TABLE statement:

```
CREATE TABLE ARTWORK(aID int(3) NOT NULL, artID int(3) NOT NULL, title varchar(30) NOT NULL, creationDate DATE NOT NULL, acquisitionDate DATE, price INT(15), form varchar(20),PRIMARY KEY(artID),FOREIGN KEY(aID) REFERENCES ARTIST (aID));
```

Below the query, there are links for '[Edit inline]', '[Edit]', and '[Create PHP code]'. A message at the top indicates: 'MySQL returned an empty result set (i.e. zero rows). (Query took 0.0468 seconds.)'

SELECT Statement for ARTWORK



The screenshot shows the phpMyAdmin interface with the 'art_gallery' database selected. The 'artwork' table is chosen, and the SQL tab is active. The query is `SELECT * FROM `artwork``. The results show 24 rows (0-24) with columns: aID, artID, title, creationDate, acquisitionDate, price, and form.

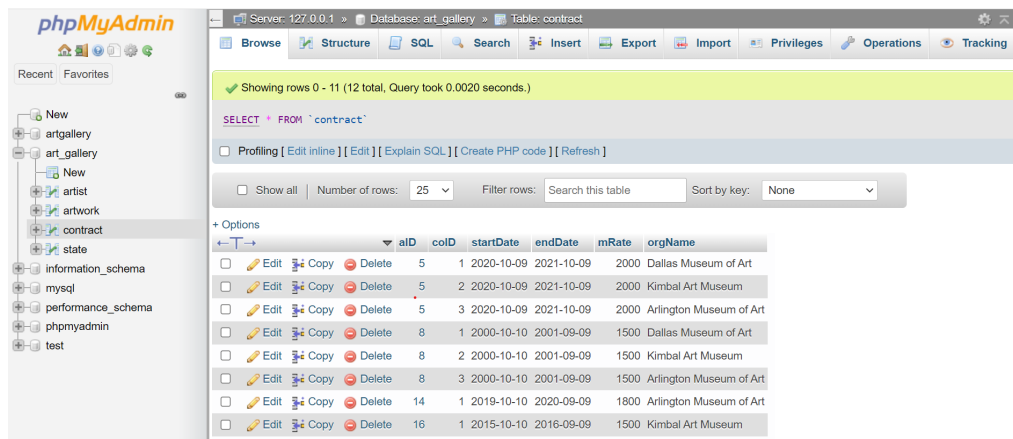
aID	artID	title	creationDate	acquisitionDate	price	form
1	1	Refugee Camp	2020-09-09	2021-02-07	12000	painting
1	2	Waiting	2020-12-28	2021-02-07	15000	painting
1	3	Palestinian Women	2021-01-01	2021-02-07	1700	painting
2	4	Al Momin	1920-02-19	1921-03-09	20000	painting
2	5	God	1921-01-01	1921-07-08	22000	painting
3	6	Bird	2021-02-04	2021-05-04	40000	sculpture
3	7	Leaves	2021-01-04	2021-07-07	30000	sculpture
4	8	The Holy Man	2014-01-01	2014-01-02	10000	sculpture
5	9	Salvador Dali	2014-01-01	2015-01-01	190	print

CREATE TABLE statement for CONTRACT



The screenshot shows the phpMyAdmin interface with the 'art_gallery' database selected. The SQL tab is active, and the query is `CREATE TABLE CONTRACT(aID int(3) NOT NULL, coID int(3) NOT NULL, startDate DATE NOT NULL, endDate DATE, mRate int(10), orgName VARCHAR(35) NOT NULL, PRIMARY KEY(aID,coID), FOREIGN KEY (aID) REFERENCES ARTIST(aID));`. The results show an empty result set.

SELECT Statement for CONTRACT



The screenshot shows the phpMyAdmin interface with the 'art_gallery' database selected. The 'contract' table is chosen, and the SQL tab is active. The query is `SELECT * FROM `contract``. The results show 11 rows (0-11) with columns: aID, coID, startDate, endDate, mRate, and orgName.

aID	coID	startDate	endDate	mRate	orgName
5	1	2020-10-09	2021-10-09	2000	Dallas Museum of Art
5	2	2020-10-09	2021-10-09	2000	Kimbal Art Museum
5	3	2020-10-09	2021-10-09	2000	Arlington Museum of Art
8	1	2000-10-10	2001-09-09	1500	Dallas Museum of Art
8	2	2000-10-10	2001-09-09	1500	Kimbal Art Museum
8	3	2000-10-10	2001-09-09	1500	Arlington Museum of Art
14	1	2019-10-10	2020-09-09	1800	Arlington Museum of Art
16	1	2015-10-10	2016-09-09	1500	Kimbal Art Museum

CREATE TABLE statement for CUSTOMER

The screenshot shows the phpMyAdmin interface with the 'art_gallery' database selected. The SQL tab is active, displaying the following CREATE TABLE statement:

```
CREATE TABLE CUSTOMER(cID INT(3) NOT NULL, name VARCHAR(40) NOT NULL, street VARCHAR(40) NOT NULL, city VARCHAR(20), stateAb char(2) NOT NULL, zipcode VARCHAR(20), PRIMARY KEY(cID), FOREIGN KEY(stateAb) REFERENCES STATE(stateAb));
```

Below the query, a message states: "MySQL returned an empty result set (i.e. zero rows). (Query took 0.0570 seconds.)"

SELECT Statement for CUSTOMER

The screenshot shows the phpMyAdmin interface with the 'art_gallery' database selected and the 'customer' table chosen. The SQL tab is active, displaying the following SELECT statement:

```
SELECT * FROM `customer`
```

Below the query, a message states: "Showing rows 0 - 21 (22 total, Query took 0.0024 seconds.)"

The table data is displayed below the query:

	cID	name	street	city	stateAb	zipcode
<input type="checkbox"/>	1	Mahbod Seraji	1500 E Exchange Road	Allen	TX	75002-4504
<input type="checkbox"/>	2	Shazadi Seraji	1500 E Exchange Road	Allen	TX	75002-4504
<input type="checkbox"/>	3	Nadia Hashimi	1405 Julian Street	Addison	TX	75001-4633
<input type="checkbox"/>	4	Tahmima Anam	11200 Graceland Lane	Frisco	TX	75033-0062
<input type="checkbox"/>	5	Elena Lee	800 Preston Road	Gunter	TX	75058-0001
<input type="checkbox"/>	6	Harper Lee	800 Preston Road	Gunter	TX	75058-0001
<input type="checkbox"/>	7	Scott Green	150 Main Road	Gunter	TX	75058-0001
<input type="checkbox"/>	8	Mary Green	150 Main Road	Gunter	TX	75058-0001

CREATE TABLE statement for BOUGHT

The screenshot shows the phpMyAdmin interface with the 'art_gallery' database selected. The SQL tab is active, displaying the following CREATE TABLE statement:

```
CREATE TABLE BOUGHT(artID int(3) NOT NULL, cID int(3) NOT NULL, saleDate DATE NOT NULL, PRIMARY KEY (artID, cID), FOREIGN KEY(artID) REFERENCES ARTWORK(artID));
```

Below the query, a message states: "MySQL returned an empty result set (i.e. zero rows). (Query took 0.0560 seconds.)"

SELECT Statement for BOUGHT

The screenshot shows the phpMyAdmin interface with the 'bought' table selected. The SQL query is `SELECT * FROM `bought``. The table structure is as follows:

artID	clID	saleDate
1	1	2021-07-08
1	2	2021-07-08
3	3	2021-08-08
6	4	2021-07-07
11	5	2021-08-08
11	6	2021-08-08
11	7	2021-08-08
11	8	2021-08-08
13	9	2020-08-09

CREATE TABLE statement for PAYMENTS

The screenshot shows the phpMyAdmin interface with the 'payments' table selected. The SQL query is `CREATE TABLE PAYMENTS (pID int(3) NOT NULL, artID int(3) NOT NULL, upfrontDate DATE NOT NULL, finalDate DATE, PRIMARY KEY(pID), FOREIGN KEY(artID) REFERENCES ARTWORK(artID))`. The table structure is as follows:

pID	artID	upfrontDate	finalDate
1	1	2021-02-08	2021-07-08
2	2	2021-02-08	NULL
3	3	2021-02-08	2021-08-08
4	4	1921-03-11	NULL
5	5	1921-07-08	NULL
6	6	2021-05-04	2021-07-07
7	7	2021-07-07	NULL
8	8	2014-01-02	NULL
9	9	2015-01-04	NULL

SELECT Statement for PAYMENTS

The screenshot shows the phpMyAdmin interface with the 'payments' table selected. The SQL query is `SELECT * FROM `payments``. The table structure is as follows:

pID	artID	upfrontDate	finalDate
1	1	2021-02-08	2021-07-08
2	2	2021-02-08	NULL
3	3	2021-02-08	2021-08-08
4	4	1921-03-11	NULL
5	5	1921-07-08	NULL
6	6	2021-05-04	2021-07-07
7	7	2021-07-07	NULL
8	8	2014-01-02	NULL
9	9	2015-01-04	NULL

PART - 2

1Q. Retrieve the total number of artists in each state along with the state name (not the state abbreviation).

Sol.

Showing rows 0 - 4 (5 total, Query took 0.0022 seconds.)

```
SELECT stateName AS State, (select count(*) from artist where artist.stateAb = state.stateAb) AS 'NumberOfArtists' FROM state;
```

☐ Profiling [\[Edit inline \]](#) [\[Edit \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

☐ Show all | Number of rows: 25 | Filter rows:

+ Options

State	NumberOfArtists
Texas	12
Oklahoma	5
New Mexico	0
Louisiana	0
Kansas	4

Q2. Retrieve the artist's name, date of birth, and the title of artwork that was sold on August 8, 2021.

Sol.

Showing rows 0 - 1 (2 total, Query took 0.0037 seconds.)

```
SELECT DISTINCT name AS ArtistName, BirthDate, Title FROM artist a INNER JOIN artwork aw ON a.aID = aw.aID INNER JOIN bought b ON b.artID=aw.artID WHERE saleDate='2021-08-08';
```

☐ Profiling [\[Edit inline \]](#) [\[Edit \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

☐ Show all | Number of rows: 25 | Filter rows: Sort by key: None

+ Options

ArtistName	BirthDate	Title
Abed Abdi	2000-01-01	Palestinian Women
Manishi Dey	1994-07-15	Musician

Q3. Retrieve the names and address (Street, City, State Abbreviation, and Zip code) of all the artists in our database whose first name start with a vowel.

Sol.

Showing rows 0 - 6 (7 total, Query took 0.0022 seconds.)

```
Select name AS ArtistName, concat(street," ",city," ",stateAb," ", zipcode,"") AS Address FROM artist where name rlike '^[AEIOUaeiou].*$';
```

☐ Profiling [\[Edit inline \]](#) [\[Edit \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

☐ Show all | Number of rows: 25 | Filter rows: Sort by key: None

+ Options

	ArtistName	Address
<input type="checkbox"/> Edit Copy Delete	Abed Abdi	309 Hcounty Road Abbott TX 76621-0057
<input type="checkbox"/> Edit Copy Delete	Ismail Gulb	405 E Mesquite Street Abbott TX 76621-0057
<input type="checkbox"/> Edit Copy Delete	Abdur Rahman	1000 County Road Bradley Ok 73011-0121
<input type="checkbox"/> Edit Copy Delete	Albert Bierstadt	400 Spruce Street Leavenworth KS 66048-0001
<input type="checkbox"/> Edit Copy Delete	Edward Hopper	1500 255th Street Hillisdale KS 66036-0061
<input type="checkbox"/> Edit Copy Delete	Ekene Maduka	15TH Street Plano TX 75086-0015
<input type="checkbox"/> Edit Copy Delete	Olu Amoda	200 Travis Street Sherman TX 75090-0005

Q4. Retrieve the names of the artists, list of their artwork (title) when the acquisition price is higher than \$20,000 and less than \$40,000. Order the result by the price of the artworks.

Sol.

Showing rows 0 - 8 (9 total, Query took 0.0031 seconds.)

```
SELECT name,title,price FROM artist a INNER JOIN artwork aw ON a.aID=aw.aID AND aw.price>20000 AND aw.price<40000 ORDER BY price;
```

☐ Profiling [\[Edit inline \]](#) [\[Edit \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

name	title	price
Georgia O'Keeffe	Sky Above Clouds	21000
Georgia O'Keeffe	The Black Place	22000
Ismail Gulg	God	22000
Edward Hopper	Gas	22000
Edward Hopper	Nighthawks	25000
Tatsuo Miyajima	Time Waterfall	29000
Edward Hopper	Night Windows	30000
Sunil Das	The Lady	30000
Shakir Ali	Leaves	30000

Q5. Retrieve the titles, acquisition price, and the artists names of the 10 least expensive artworks in the gallery.

Sol.

Showing rows 0 - 9 (10 total, Query took 0.0037 seconds.)

```
SELECT title AS ArtworkTitle, (SELECT name FROM artist a WHERE a.aID=aw.aID) AS ArtistName, price AS AquisitionPrice FROM artwork aw ORDER BY price ASC LIMIT 10;
```

☐ Profiling [\[Edit inline \]](#) [\[Edit \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

+ Options

ArtworkTitle	ArtistName	AquisitionPrice
Salvador Dali	Kalipada Ghoshal	190
Indian Spear Fishing	Albert Bierstadt	200
Landscape	Manishi Dey	200
Bridal Veil Falls	Albert Bierstadt	200
Street in Nassau	Albert Bierstadt	200
Donner Lake	Albert Bierstadt	200
A Rustic Mill	Albert Bierstadt	200
Sunset in the Rockies	Albert Bierstadt	200
Mount Hood	Albert Bierstadt	200
Buffalo Trail	Albert Bierstadt	200

Q6. Retrieve the artist name, artwork title, and the acquisition price for all artworks of artists who hale from Kansas and has an artwork whose acquisition price is between \$8,000.00 and \$15,000.00. List the result in a descending order by the price of the artwork. The price should be stated with \$, appropriate commas, and up to 2 decimal places. (Example: \$12,000.00)

Sol.

Showing rows 0 - 3 (4 total, Query took 0.0047 seconds.)

```
SELECT name AS ArtistName, title, Concat('$', Format(price,2)) AS Price, stateName FROM artist a INNER JOIN state s ON a.stateAb=s.stateAb INNER JOIN artwork aw ON a.aID=aw.aID AND price BETWEEN 8000 AND 15000 WHERE a.stateAb='KS' ORDER BY aw.price DESC;
```

☐ Profiling [\[Edit inline \]](#) [\[Edit \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

ArtistName	title	Price	stateName
Edward Hopper	Ground Swell	\$15,000.00	Kansas
Manishi Dey	Musician	\$15,000.00	Kansas
Edward Hopper	Morning Sun	\$12,000.00	Kansas
Nandalal Bose	Singawala	\$10,000.00	Kansas

Q7. Retrieve a list of state names, artist names from each of the states, and the total number of artworks by each artist to have been listed in the Art Gallery. Order the list by the number of their artworks. Exclude Texas artists from the list.

Sol.

Showing rows 0 - 8 (9 total, Query took 0.0043 seconds.)

SELECT stateName,name,COUNT(aw.artID) AS TotalArtworks FROM state s, artist a, artwork aw WHERE s.stateAb=a.stateAb AND a.aID=aw.aID AND s.stateAb!='TX' GROUP BY a.name, s.stateName ORDER BY COUNT(aw.aID);

Profiling Edit inline Edit Explain SQL Create PHP code Refresh

Show all Number of rows: 25 Filter rows: Search this table

+ Options

stateName	name	TotalArtworks
Oklahoma	Kalipada Ghoshal	1
Oklahoma	Zhan Wang	1
Oklahoma	Abdur Rahman	1
Oklahoma	Li Chen	1
Kansas	Nandalal Bose	1
Oklahoma	Tatsuo Miyajima	1
Kansas	Manishi Dey	3
Kansas	Edward Hopper	5
Kansas	Albert Bierstadt	12

Q8. Retrieve, the minimum, maximum, average, and total price of listed artwork of the artists from the state of Kansas. The price should be stated with \$, appropriate commas, and up to 2 decimal places. (Example: \$12,000.00)

Sol.

Showing rows 0 - 0 (1 total, Query took 0.0139 seconds.)

SELECT Concat('\$', Format (MIN(price),2)) AS MinPrice, Concat('\$', Format (MAX(price),2)) AS MaxPrice, Concat('\$', Format (AVG(price),2)) AS AvgPrice, Concat('\$', Format (SUM(price),2)) AS TotalPrice FROM artwork aw INNER JOIN artist a ON a.aID=aw.aID INNER JOIN state s ON s.stateAb=a.stateAb WHERE s.stateName='Kansas';

Profiling Edit inline Edit Explain SQL Create PHP code Refresh

Show all Number of rows: 25 Filter rows: Search this table

+ Options

MinPrice	MaxPrice	AvgPrice	TotalPrice
\$200.00	\$40,000.00	\$9,066.67	\$190,400.00

Q9. Retrieve the states, the total number of customers from each state. (Your query will be considered incorrect if it returns the state abbreviation instead of the full state name)

Sol.

Showing rows 0 - 4 (5 total, Query took 0.0020 seconds.)

SELECT stateName, (select count(*) from customer where customer.stateAb = state.stateAb) AS 'NumberOfCustomers' FROM state;

Profiling Edit inline Edit Explain SQL Create PHP code Refresh

Show all Number of rows: 25 Filter rows: Search this table

+ Options

stateName	NumberOfCustomers
Texas	14
Oklahoma	0
New Mexico	4
Louisiana	4
Kansas	0

Q10. Retrieve the artist name, artwork title and the acquisition price of the most expensive artwork acquired by the gallery so far.

Sol.

Showing rows 0 - 0 (1 total, Query took 0.0043 seconds.)

SELECT name AS ArtistName, title AS Title, price AS AcquisitionPrice FROM artwork aw INNER JOIN artist a ON aw.aID=a.aID ORDER BY aw.price DESC LIMIT 1;

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

+ Options

ArtistName	Title	AcquisitionPrice
Modupeola Fadugba	Four Head Bend	59000

Q11. Retrieve a list of records that each consists of the customer’s name, and the title of the artwork they bought, and their price for all the artwork that was bought by only one customer. How will you verify that the results of your query are correct?

Sol.

Showing rows 0 - 11 (12 total, Query took 0.0070 seconds.)

SELECT name,title,price FROM bought b INNER JOIN customer c ON c.cID=b.cID INNER JOIN artwork aw ON aw.artID=b.artID WHERE b.artID IN(SELECT b.artID FROM bought b GROUP BY b.artID HAVING COUNT(*)=1);

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

name	title	price
Nadia Hashimi	Palesteanian Women	1700
Tahmima Anam	Bird	40000
Tom Twain	Singawala	10000
Maya Morrison	Blue Horse	20000
Randy Bradbury	Map	19000
Wu Ming	Mount Hood	200
Dia Davidar	Street in Nassau	200
Anil Desai	The Wolf River	200
Amitav Ghosh	Morning Sun	12000
Ben Okri	Leaf Motif	350
Helon Habila	Jimson Weed	18000
Ana Castillo	Twilight Breeze	15000

Q12. Retrieve a list of records that is comprised of the state name, artist name, artform, and the number of pieces sold by the type of artform. Sort the list of records by the State name, artist’s name, artform, and the number of pieces sold. How can you verify that your query returns correct answers?

Sol.

Showing rows 0 - 24 (27 total, Query took 0.0048 seconds.) [stateName: KANSAS...-TEXAS...]

SELECT stateName, name AS ArtistName, form AS Artform , COUNT(*) AS 'Number of pieces sold' FROM artwork aw INNER JOIN artist a ON aw.aID=a.aID INNER JOIN state s ON s.stateID=a.stateID GROUP BY aw.form, s.stateName, a.name ORDER BY "s"."stateName" ASC

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

stateName	ArtistName	Artform	Number of pieces sold
Kansas	Manishi Dey	print	1
Kansas	Manishi Dey	sculpture	1
Kansas	Manishi Dey	painting	1
Kansas	Nandlal Bose	painting	1
Kansas	Albert Bierstadt	print	11
Kansas	Albert Bierstadt	painting	1
Kansas	Edward Hopper	painting	4
Kansas	Edward Hopper	sculpture	1
Oklahoma	Abdur Rahman	sculpture	1
Oklahoma	Kalipada Chakrabarti	print	1
Oklahoma	Tathau Myagma	sculpture	1
Oklahoma	Li Chen	painting	1
Oklahoma	Zhan Yang	sculpture	1
Texas	Jani Jodi	painting	3
Texas	Ismail Gulij	painting	2
Texas	Shakir Ali	sculpture	2
Texas	Raja Ravi Varma	painting	1
Texas	Sunil Das	painting	3
Texas	Sunil Das	sculpture	1
Texas	Jasper Johns	painting	4
Texas	Winslow Homer	painting	5
Texas	Georgia O'Keeffe	painting	1
Texas	Georgia O'Keeffe	print	2
Texas	Modupeola Fadugba	painting	1
Texas	Ekene Maduka	painting	1

Q13. Retrieve a list of records that each consists of the customer’s name, the state that hale from, and the title of the artwork they bought, for all the artwork that was bought by a group of two or more people.

Sol.

Showing rows 0 - 9 (10 total, Query took 0.0169 seconds)

```
SELECT name AS CustomerName, stateName, title AS ArtworkTitle FROM customer c INNER JOIN bought b ON b.cID=c.cID INNER JOIN artwork aw ON aw.artID=b.artID INNER JOIN state s ON s.stateAb=c.stateAb WHERE b.artID IN(SELECT b.artID FROM bought b GROUP BY b.artID HAVING COUNT(*)>1);
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all

Number of rows: 25

Filter rows: Search this table

Sort by key: None

+ Options

CustomerName	stateName	ArtworkTitle
Mahbod Seraji	Texas	Refugee Camp
Shazadi Seraji	Texas	Refugee Camp
Elena Lee	Texas	Musician
Harper Lee	Texas	Musician
Scott Green	Texas	Musician
Mary Green	Texas	Musician
Jay Steinbeck	Texas	Three Flags
Linda Steinbeck	Texas	Three Flags
Carlos Fuentes	New Mexico	Mirror Giden
Cristina Fuentes	New Mexico	Mirror Giden

Q14. Execute a command to delete a record that violates a referential integrity constraint. State the message produced by the DBMS.

Sol.

Error

SQL query: Copy

DELETE from artist WHERE artist.aID='1';

MySQL said:

#1451 - Cannot delete or update a parent row: a foreign key constraint fails ('art_gallery`.`artwork`, CONSTRAINT `artwork_ibfk_1` FOREIGN KEY (`aID`) REFERENCES `artist` (`aID`))

Q15. Execute an update command for PAYMENTS table that attempts to update a record and thereby violates the foreign key constraint. State the message produced by the DBMS.

Sol.

Error

SQL query: Copy

UPDATE payments SET payments.artID='61' WHERE payments.artID='10';

MySQL said:

#1452 - Cannot add or update a child row: a foreign key constraint fails ('art_gallery`.`payments`, CONSTRAINT `three` FOREIGN KEY (`artID`) REFERENCES `artwork` (`artID`))


Q16. Execute 3 insert commands for artist table that attempt to insert records, such that the records violate the explicit schema-based constraints (Key, Entity Integrity, Referential Integrity constraints). Make each of the 3 records violate a different types of integrity constraint. Include the insert statements and the error messages produced.

Sol.

Error

SQL query: [Copy](#)

```
INSERT INTO artist VALUES (1, 'Subhash','1997-02-10','null', '10','801 Cooper Street','Arlington', 'TX','76013-1964');
```


MySQL said: 

#1062 - Duplicate entry '1' for key 'PRIMARY'

Error

SQL query: [Copy](#)

```
INSERT INTO artist VALUES (NULL,'Subhash','1997-02-10','null','10','801 Cooper Street','Arlington','TX','76013-1964');
```

MySQL said: 

#1048 - Column 'aID' cannot be null

Error

SQL query: [Copy](#)

```
INSERT INTO artwork VALUES (55,61,'guitan','2020-02-10', '2021-09-12', '1000', 'painting');
```

MySQL said: 

#1452 - Cannot add or update a child row: a foreign key constraint fails ('art_gallery`.`artwork`, CONSTRAINT 'artwork_ibfk_1' FOREIGN KEY ('aID') REFERENCES 'artist' ('aID'))