

EXHIBITION GALLERY MANAGEMENT SYSTEM

Final Project for SQL

Module by

RAHULYADAV

The main objective of creating an EXHIBITION Gallery database project is

- To manage the details of gallery, exhibition, artwork and artist. It manages all the sales and inventory in the gallery. The purpose of the project is to build an application program to reduce the manual work.
- To track all the details about the sales of the artwork, the customer that bought it, etc. It manages the information about the artwork. Provides an information and description of the artworks left, thereby increasing the efficiency of managing the gallery. The organisation can maintain a computerized record of the artwork present in the gallery.
- To help in the utilization of the resources in an effective manner. It maintains a list of all the customers and the various artwork that they have bought and the money that have invested in each.
- To maintain the record of exhibitions and various sales made during it. The objective of developing such a computerized system is to reduce the paper work and save time in art gallery database management, thereby increasing the efficiency and decreasing the work load.
- To develop such a computerized system is to reduce the paper work and save time in art gallery database management, thereby increasing the efficiency and decreasing the work load.

This database contains 6 tables:

1. GALLERY
2. ARTIST_WORK
3. ARTIST
4. Customer
5. EXHIBITION
6. CONTACTS

How these tables/entities are related to each other is shown pictorially on next page through ER diagram, i.e., Entity Relationship Diagram.

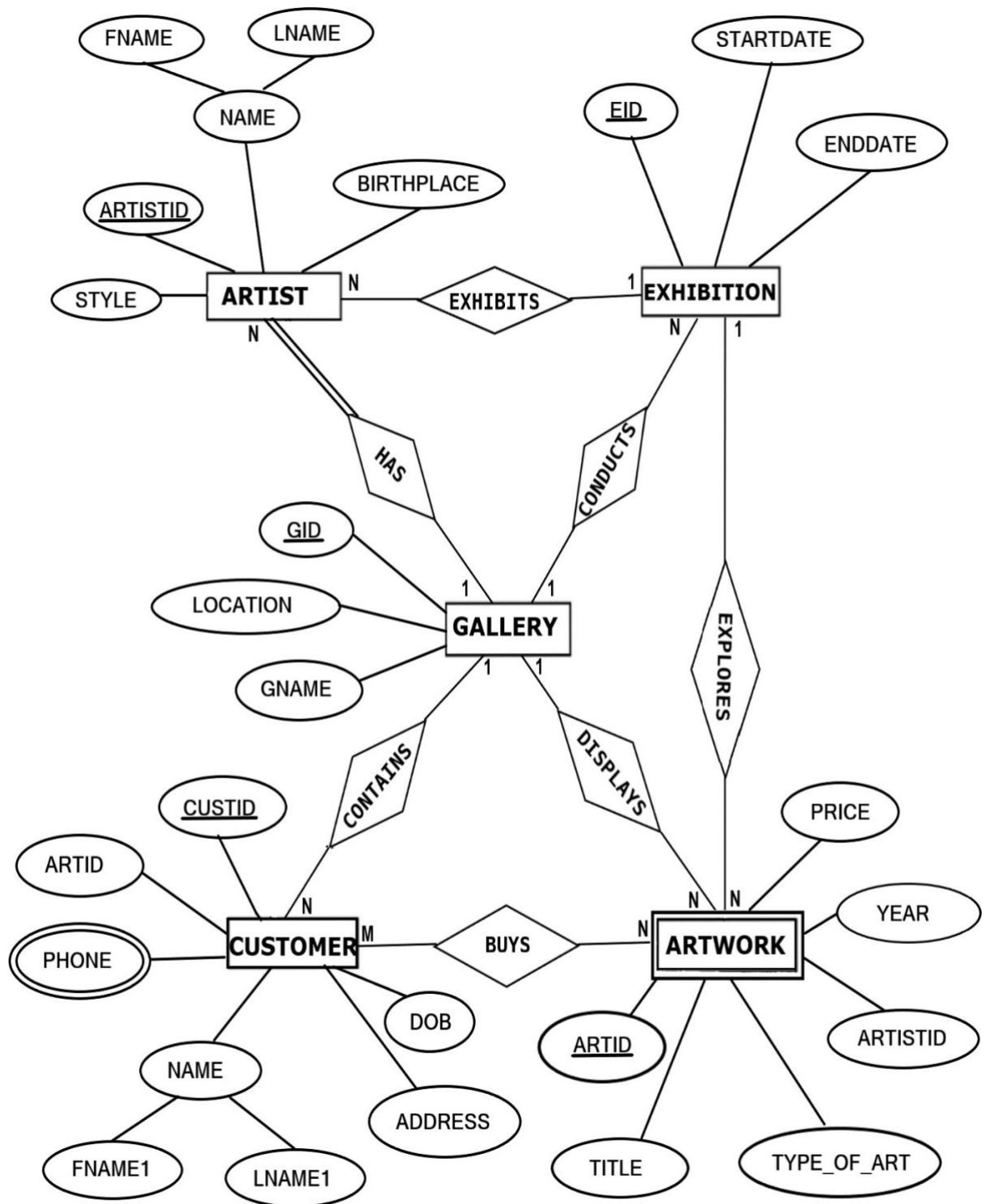


TABLE DESCRIPTION

1. GALLERY

```
15 rows in set (0.00 sec)

mysql> DESC GALLERY;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| GID   | varchar(20) | NO   | PRI | NULL    |       |
| GNAME | char(20)   | YES  |     | NULL    |       |
| LOCATION | char(20) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql>
```

2. EXHIBITION

```
mysql> DESC EXHIBITION;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| EID   | varchar(20) | NO   | PRI | NULL    |       |
| GID   | varchar(20) | YES  | MUL | NULL    |       |
| STARTDATE | date    | YES  |     | NULL    |       |
| ENDDATE | date    | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> |
```

3. ART_WORK

```
mysql> DESC ARTWORK;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| ARTID | varchar(20) | NO   | PRI | NULL    |       |
| TITLE | varchar(20) | YES  |     | NULL    |       |
| YEAR  | int         | YES  |     | NULL    |       |
| TYPE_OF_ART | varchar(20) | YES  |     | NULL    |       |
| PRICE | int         | YES  |     | NULL    |       |
| EID   | varchar(20) | YES  | MUL | NULL    |       |
| GID   | varchar(20) | YES  | MUL | NULL    |       |
+-----+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)

mysql> |
```

4. ARTIST

```
mysql> DESC ARTIST;
```

Field	Type	Null	Key	Default	Extra
ARTISTID	varchar(20)	NO	PRI	NULL	
GID	varchar(20)	YES	MUL	NULL	
CUSTID	varchar(20)	YES	MUL	NULL	
EID	varchar(20)	YES	MUL	NULL	
FNAME	char(20)	YES		NULL	
LNAME	char(20)	YES		NULL	
BIRTHPLACE	char(20)	YES		NULL	
STYLE	char(20)	YES		NULL	

8 rows in set (0.00 sec)

```
mysql> |
```

5. CUSTOMER

```
mysql> DESC CUSTOMER;
```

Field	Type	Null	Key	Default	Extra
CUSTID	varchar(20)	NO	PRI	NULL	
GID	varchar(20)	YES	MUL	NULL	
ARTID	varchar(20)	YES	MUL	NULL	
FNAME1	char(20)	YES		NULL	
LNAME1	char(20)	YES		NULL	
DOB	date	YES		NULL	
ADDRESS	char(20)	YES		NULL	

7 rows in set (0.00 sec)

```
mysql> |
```

6. CONTACT

```
mysql> DESC CONTACTS;
```

Field	Type	Null	Key	Default	Extra
CUSTID	varchar(20)	YES	MUL	NULL	
PHONE	varchar(12)	YES		NULL	

2 rows in set (0.00 sec)

```
mysql>
```

COMMANDS

DATABASE-

```
CREATE DATABASE EGMS;  
USE EGMS;
```

1. CREATING GALLERY TABLE

```
CREATE TABLE GALLERY  
(GID VARCHAR(20) PRIMARY KEY,  
GNAME CHAR(20),  
LOCATION CHAR(20));
```

2. CREATE EXHIBITION TABLE

```
CREATE TABLE EXHIBITION  
(EID VARCHAR(20) PRIMARY KEY,  
GID VARCHAR(20),  
STARTDATE DATE,  
ENDDATE DATE,  
FOREIGN KEY(GID) REFERENCES GALLERY(GID) ON DELETE CASCADE);
```

3. CREATE ARTWORK TABLE

```
CREATE TABLE ARTWORK  
(ARTID VARCHAR(20) PRIMARY KEY,  
TITLE VARCHAR(20),  
YEAR INT,  
TYPE_OF_ART VARCHAR(20),  
PRICE INT,  
EID VARCHAR(20), GID VARCHAR(20),  
FOREIGN KEY(EID) REFERENCES EXHIBITION(EID) ON DELETE CASCADE,  
FOREIGN KEY(GID) REFERENCES GALLERY(GID) ON DELETE CASCADE);
```

4. CREATE CUSTOMER TABLE

```
CREATE TABLE CUSTOMER  
(CUSTID VARCHAR(20) PRIMARY KEY,  
GID VARCHAR(20),  
ARTID VARCHAR(20),  
FNAME1 CHAR(20),  
LNAME1 CHAR(20),  
DOB DATE,  
ADDRESS CHAR(20),  
constraint galid_fk FOREIGN KEY(GID) REFERENCES GALLERY(GID) ON DELETE CASCADE,  
constraint artid_fk FOREIGN KEY(ARTID) REFERENCES artwork(ARTID) ON DELETE CASCADE);
```

5. CREATE ARTIST TABLE

```
CREATE TABLE ARTIST
(ARTISTID VARCHAR(20) PRIMARY KEY,
GID VARCHAR(20),
CUSTID VARCHAR(20),
EID VARCHAR(20),
FNAME CHAR(20),
LNAME CHAR(20),
BIRTHPLACE CHAR(20),
STYLE CHAR(20),
FOREIGN KEY(GID) REFERENCES GALLERY(GID) ON DELETE CASCADE,
FOREIGN KEY (CUSTID) REFERENCES CUSTOMER(CUSTID) ON DELETE
CASCADE,
FOREIGN KEY(EID) REFERENCES EXHIBITION(EID) ON DELETE CASCADE);
```

***alter table artwork**

```
FOREIGN KEY (ARTISTID) REFERENCES ARTIST(ARTISTID) ON DELETE
CASCADE);
```

6. CREATE CONTACTS TABLE

```
CREATE TABLE CONTACTS
(CUSTID VARCHAR(20),
PHONE VARCHAR(12),
FOREIGN KEY (CUSTID) REFERENCES CUSTOMER(CUSTID) ON DELETE
CASCADE);
```

RECORDS-

1. INSERTION OF GALLERY TABLE

```
INSERT INTO GALLERY VALUES('NG123','National Gallery', 'Jaipur');
INSERT INTO GALLERY VALUES('BM123','British Museum', 'Navi mumbai');
INSERT INTO GALLERY VALUES('JG123','Jahangir Gallery', 'Mumbai');
INSERT INTO GALLERY VALUES('TLM123','The Louvre Museum', 'pune');
INSERT INTO GALLERY VALUES('MM123','Metropolitan Museum', 'vashi');
INSERT INTO GALLERY VALUES('sm123','shivaji museum', 'pune');
INSERT INTO GALLERY VALUES('NC123','Nehru center', 'delhi');
INSERT INTO GALLERY VALUES('gm123','Gandhi museum', 'Mumbai');
INSERT INTO GALLERY VALUES('TWM123','The wax Museum', 'pune');
INSERT INTO GALLERY VALUES('cm123','cricket Museum', 'vashi');
```

2. INSERTION OF EXHIBITION TABLE

```
INSERT INTO EXHIBITION VALUES('G123','NG123','2018-12-01','2018-12-15');
INSERT INTO EXHIBITION VALUES('H123','BM123','2018-12-21','2019-01-05');
INSERT INTO EXHIBITION VALUES('I123','MM123','2019-01-25','2019-02-05');
INSERT INTO EXHIBITION VALUES('J123','TLM123','2018-12-15','2019-01-15');
```

```

INSERT INTO EXHIBITION VALUES('K123','JG123','2019-03-09','2019-03-27');
INSERT INTO EXHIBITION VALUES('m123','sm123','2021-11-01','2021-11-15');
INSERT INTO EXHIBITION VALUES('N123','nc123','2019-08-21','2020-01-05');
INSERT INTO EXHIBITION VALUES('l123','gm123','2021-02-25','2021-03-05');
INSERT INTO EXHIBITION VALUES('w123','TwM123','2022-05-15','2022-06-15');
INSERT INTO EXHIBITION VALUES('c123','cm123','2021-03-09','2021-03-27');

```

3. INSERTION OF ARTWORK TABLE

```

INSERT INTO ARTWORK VALUES('A1','Mona Lisa','1503','Painting','100000','G123','NG123');
INSERT INTO ARTWORK
VALUES('A2','Poppies','1873','photography','15000','H123','MM123');
INSERT INTO ARTWORK
VALUES('A3','Guernica','1937','Painting','25000','l123','TLM123');
INSERT INTO ARTWORK VALUES('A4','The Night Watch','1642','drawings','90850','J123','BM123');
INSERT INTO ARTWORK VALUES('A5','Two Sisters','2010','Sculpture','28000','K123','JG123');

```

```

INSERT INTO ARTWORK
VALUES('A6','worldcup','2011','Painting','900000','c123','cm123');
INSERT INTO ARTWORK
VALUES('A7','yatra','1920','photography','1500','n123','nc123');
INSERT INTO ARTWORK VALUES('A8','Taj mahal','1937','Painting','25000','g123','ng123');
INSERT INTO ARTWORK
VALUES('A9','firstpm','1947','drawings','90850','n123','nc123');
INSERT INTO ARTWORK
VALUES('A10','maharaj','1650','paint','28000','m123','sm123');
INSERT INTO ARTWORK
VALUES('A11','gandhi','1900','Painting','100000','l123','gm123');
INSERT INTO ARTWORK
VALUES('A12','dhoni','2007','photography','15000','c123','cm123');
INSERT INTO ARTWORK VALUES('A13','big B','1980','Painting','25000','w123','TwM123');
INSERT INTO ARTWORK
VALUES('A14','srk','2000','drawings','90850','w123','twm123');
INSERT INTO ARTWORK
VALUES('A15','sachin200','2010','photo','28000','c123','cm123');

```


4. INSERTION OF CUSTOMER TABLE

```
INSERT INTO CUSTOMER VALUES('c1','nc123','A9','Akshay','Thakur','2000-04-16','banglore');
```

```
INSERT INTO CUSTOMER
```

```
VALUES('c2','TwM123','A14','Ashutosh','Ranjan','1998-02-04','goa');
```

```
INSERT INTO CUSTOMER VALUES('c3','cm123','A6','Ayush','Dhar','1998-09-28','vashi');
```

```
INSERT INTO CUSTOMER VALUES('c4','cm123','A6','Avanish','Mehta','1994-10-05','Mumbai');
```

```
INSERT INTO CUSTOMER
```

```
VALUES('c5','twm123','A14','Prashant','Mehta','1996-06-18','surat');
```

```
INSERT INTO CUSTOMER VALUES('c6','sm123','A10','ram','yadav','2003-04-18','panji');
```

```
INSERT INTO CUSTOMER VALUES('c7','gm123','A11','Ashu','pal','1998-02-06','satara');
```

```
INSERT INTO CUSTOMER VALUES('c8','cm123','A12','rahul','yadav','1999-09-08','uran');
```

```
INSERT INTO CUSTOMER VALUES('c9','cm123','A12','sonu','sharma','1991-10-09','Mumbai');
```

```
INSERT INTO CUSTOMER VALUES('c10','ng123','A8','rajesh','yadav','1992-06-15','vapi');
```

```
INSERT INTO CUSTOMER VALUES('c11','nc123','A9','Akshay','sanap','2002-04-14','jaipur');
```

```
INSERT INTO CUSTOMER
```

```
VALUES('c12','TwM123','A14','santosh','jadhav','1999-02-24','ncr');
```

```
INSERT INTO CUSTOMER VALUES('c13','cm123','A6','Ayush','patil','1997-09-20','noida');
```

```
INSERT INTO CUSTOMER VALUES('c14','cm123','A6','Annu','kole','1996-10-15','delhi');
```

```
INSERT INTO CUSTOMER VALUES('c15','twm123','A14','jyoti','singh','1994-06-19','surat');
```

```
INSERT INTO CUSTOMER VALUES('c16','bm123','A4','yash','pal','2001-04-12','delhi');
```

```
INSERT INTO CUSTOMER VALUES('c17','mM123','A2','sumit','tole','1992-03-
```

```

04','kolkata');
INSERT INTO CUSTOMER VALUES('c18','cm123','A15','Ayush','Dhar','1993-09-
13','vashi');
INSERT INTO CUSTOMER
VALUES('c19','cm123','A15','Avanish','Mehta','1995-11-05','Mumbai');
INSERT INTO CUSTOMER
VALUES('c20','twm123','A14','Prashant','Mehta','1999-06-24','kolkata');

```

5. INSERTION OF ARTIST TABLE

```

INSERT INTO ARTIST
VALUES('ART1','MM123','c1','nc123','aditi','rane','pune','Oil on Canvas');
INSERT INTO ARTIST
VALUES('ART2','TLM123','c2','w123','shruti','patel','kolaphur','Analytic
Cubism');
INSERT INTO ARTIST
VALUES('ART3','BM123','c3','c123','ritu','gambhir','delhi','Oil Painting');
INSERT INTO ARTIST
VALUES('ART4','JG123','c4','c123','anjali','singh','punjab','Oil Painting');
INSERT INTO ARTIST
VALUES('ART5','NG123','c5','w123','priya','tole','oria','High Renaissance');

```

6. INSERTION OF CONTACTS TABLE

```

INSERT INTO CONTACTS VALUES('c1','9456805776');
INSERT INTO CONTACTS VALUES('c2','8073271337');
INSERT INTO CONTACTS VALUES('c3','9980904736');
INSERT INTO CONTACTS VALUES('c4','7737564076');
INSERT INTO CONTACTS VALUES('c5','8002391707');
INSERT INTO CONTACTS VALUES('c6','9456458956');
INSERT INTO CONTACTS VALUES('c7','8073272323');
INSERT INTO CONTACTS VALUES('c8','998095656');
INSERT INTO CONTACTS VALUES('c9','7737564555');
INSERT INTO CONTACTS VALUES('c10','8002391999');
INSERT INTO CONTACTS VALUES('c11','9456565776');
INSERT INTO CONTACTS VALUES('c12','8079651337');
INSERT INTO CONTACTS VALUES('c13','9587804736');
INSERT INTO CONTACTS VALUES('c14','1237564076');
INSERT INTO CONTACTS VALUES('c15','8022221707');

```

QUERIES-

1. FETCH CUST DETAILS USING CONATCATS TABLES.

SELECT * FROM CUSTOMER AS C LEFT JOIN CONTACTS AS D ON C.CUSTID=D.CUSTID;

```
mysql> SELECT * FROM CUSTOMER AS C LEFT JOIN CONTACTS AS D ON C.CUSTID=D.CUSTID;
```

CUSTID	GID	ARTID	FNAME1	LNAME1	DOB	ADDRESS	CUSTID	PHONE
c1	nc123	A9	Akshay	Thakur	2000-04-16	banglore	c1	9456805776
c10	ng123	A8	rajesh	yadav	1992-06-15	vapi	c10	8002391999
c11	nc123	A9	Akshay	sanap	2002-04-14	jaipur	c11	9456565776
c12	TwM123	A14	santosh	jadhav	1999-02-24	ncr	c12	8079651337
c13	cm123	A6	Ayush	patil	1997-09-20	noida	c13	9587804736
c14	cm123	A6	Annu	kole	1996-10-15	delhi	c14	1237564076
c15	twm123	A14	jyoti	singh	1994-06-19	surat	c15	8022221707
c16	bm123	A4	yash	pal	2001-04-12	delhi	NULL	NULL
c17	mM123	A2	sumit	tole	1992-03-04	kolkata	NULL	NULL
c2	TwM123	A14	Ashutosh	Ranjan	1998-02-04	goa	c2	8073271337
c3	cm123	A6	Ayush	Dhar	1998-09-28	vashi	c3	9980904736
c4	cm123	A6	Avanish	Mehta	1994-10-05	Mumbai	c4	7737564076
c5	twm123	A14	Prashant	Mehta	1996-06-18	surat	c5	8002391707
c6	sm123	A10	ram	yadav	2003-04-18	panji	c6	9456458956
c7	gm123	A11	Ashu	pal	1998-02-06	satara	c7	8073272323
c8	cm123	A12	rahul	yadav	1999-09-08	uran	c8	998095656
c9	cm123	A12	sonu	sharma	1991-10-09	Mumbai	c9	7737564555

17 rows in set (0.00 sec)

```
mysql>
```

2. FETCH RECORDS CUST WHO HAVE BUY ARTWORK

SELECT * FROM CUSTOMER WHERE ARTID IN (SELECT ARTID FROM ARTWORK);

```
mysql> SELECT * FROM CUSTOMER WHERE ARTID IN ( SELECT ARTID FROM ARTWORK);
```

CUSTID	GID	ARTID	FNAME1	LNAME1	DOB	ADDRESS
c8	cm123	A12	rahul	yadav	1999-09-08	uran
c9	cm123	A12	sonu	sharma	1991-10-09	Mumbai
c13	cm123	A6	Ayush	patil	1997-09-20	noida
c14	cm123	A6	Annu	kole	1996-10-15	delhi
c3	cm123	A6	Ayush	Dhar	1998-09-28	vashi
c4	cm123	A6	Avanish	Mehta	1994-10-05	Mumbai
c10	ng123	A8	rajesh	yadav	1992-06-15	vapi
c17	mM123	A2	sumit	tole	1992-03-04	kolkata
c16	bm123	A4	yash	pal	2001-04-12	delhi
c7	gm123	A11	Ashu	pal	1998-02-06	satara
c6	sm123	A10	ram	yadav	2003-04-18	panji
c1	nc123	A9	Akshay	Thakur	2000-04-16	banglore
c11	nc123	A9	Akshay	sanap	2002-04-14	jaipur
c12	TwM123	A14	santosh	jadhav	1999-02-24	ncr
c15	twm123	A14	jyoti	singh	1994-06-19	surat
c2	TwM123	A14	Ashutosh	Ranjan	1998-02-04	goa
c5	twm123	A14	Prashant	Mehta	1996-06-18	surat

17 rows in set (0.00 sec)

```
SELECT *,MAX(PRICE) FROM ARTWORK;  
SELECT *,MIN(PRICE) FROM ARTWORK;
```

```
SELECT *,MAX(PRICE) FROM ARTWORK;  
SELECT *,MIN(PRICE) FROM ARTWORK;
```

```
mysql> SELECT *,MAX(PRICE) FROM ARTWORK;
```

ARTID	TITLE	YEAR	TYPE_OF_ART	PRICE	EID	GID	MAX(PRICE)
A1	Mona Lisa	1503	Painting	100000	G123	NG123	900000

```
1 row in set (0.00 sec)
```

```
mysql>
```

```
mysql> SELECT *,MIN(PRICE) FROM ARTWORK;
```

ARTID	TITLE	YEAR	TYPE_OF_ART	PRICE	EID	GID	MIN(PRICE)
A1	Mona Lisa	1503	Painting	100000	G123	NG123	1500

```
1 row in set (0.00 sec)
```

```
mysql> |
```

4. LIST OF ALL ARTWORK CREATE BY ARTIST

```
SELECT * FROM ARTIST LEFT JOIN ARTWORK ON ARTIST.GID=ARTWORK.GID;
```

```
mysql> SELECT * FROM ARTIST LEFT JOIN ARTWORK ON ARTIST.GID=ARTWORK.GID;
```

ARTISTID	GID	CUSTID	EID	FNAME	LNAME	BIRTHPLCE	STYLE	ARTID	TITLE	YEAR	TYPE_OF_ART	PRICE	EID	GID
ART1	MM123	c1	n123	aditi	rane	pune	Oil on Canvas	A2	Poppies	1873	photography	15000	H123	MM12
ART2	TLM123	c2	w123	shruti	patel	kolapur	Analytic Cubism	A3	Guernica	1937	Painting	25000	I123	TLM1
ART3	BM123	c3	c123	ritu	gambhir	delhi	Oil Painting	A4	The Night Watch	1642	drawings	90850	J123	BM12
ART4	JG123	c4	c123	anjali	singh	punjab	Oil Painting	A5	Two Sisters	2010	Sculpture	28000	H123	JG12
ART5	NG123	c5	w123	priya	tole	oria	High Renaissance	A1	Mona Lisa	1503	Painting	100000	G123	NG12
ART5	NG123	c5	w123	priya	tole	oria	High Renaissance	A8	Taj mahal	1937	Painting	25000	g123	ng12

```
6 rows in set (0.00 sec)
```

```
mysql>
```

5. LIST OF ALL EXHIBITION & GALLERY USING NATURAL JOIN

SELECT * FROM EXHIBITION NATURAL JOIN GALLERY;

```
mysql> SELECT * FROM EXHIBITION NATURAL JOIN GALLERY;
```

GID	EID	STARTDATE	ENDDATE	GNAME	LOCATION
cm123	c123	2021-03-09	2021-03-27	cricket Museum	vashi
NG123	G123	2018-12-01	2018-12-15	National Gallery	Jaipur
BM123	H123	2018-12-21	2019-01-05	British Museum	Navi mumbai
MM123	I123	2019-01-25	2019-02-05	Metropolitan Museum	vashi
TLM123	J123	2018-12-15	2019-01-15	The Louvre Museum	pune
JG123	K123	2019-03-09	2019-03-27	Jahangir Gallery	Mumbai
gm123	L123	2021-02-25	2021-03-05	Gandhi museum	Mumbai
sm123	M123	2021-11-01	2021-11-15	shivaji museum	pune
nc123	N123	2019-08-21	2020-01-05	Nehru center	delhi
TwM123	w123	2022-05-15	2022-06-15	The wax Museum	pune

10 rows in set (0.01 sec)

```
mysql>
```

6. GROUP BY

GALLERY GROUP BY LOACTION

```
mysql> SELECT LOCATION,GNAME FROM GALLERY GROUP BY LOCATION;
```

LOCATION	GNAME
Navi mumbai	British Museum
vashi	cricket Museum
Mumbai	Gandhi museum
delhi	Nehru center
Jaipur	National Gallery
pune	shivaji museum

6 rows in set (0.00 sec)

```
mysql> |
```