



Introduction

Art_Gallery:-

This is SQL based project which is done by using MySQL. It is Begginer-friendly project, anyone who are having the knowlege of basic SQL queries can slove these questions easily. However, this project is specifically done in MySQL.



We are having the four tables with

its data:-

1Paintings

2]Sales

3]Artists

4]Collectors



painting	s		
id	name	artist_id	listed_price
11	Miracle	1	300.00
12	Sunshine	1	700.00
13	Pretty woman	2	2800.00
14	Handsome man	2	2300.00
15	Barbie	3	250.00
16	Cool painting	3	5000.00
17	Black square #1000	3	50.00
18	Mountains	4	1300.00

artists		
id	first_name	last_name
1	Thomas	Black
2	Kate	Smith
3	Natali	Wein
4	Francesco	Benelli

sales					
d	date	painting_id	artist_id	collector_id	sales_price
1001	2021- 11-01	13	2	104	2500.00
1002	2021- 11-10	14	2	102	2300.00
1003	2021- 11-10	n	1	102	300.00
1004	2021- 11-15	16	3	103	4000.00
1005	2021- 11-22	15	3	103	200.00
1006	2021- 11-22	17	3	103	50.00

collectors		
id	first_name	last_name
101	Brandon	Cooper
102	Laura	Fisher
103	Christina	Buffet
104	Steve	Stevenson



Q.1]We want to list paintings that are priced higher than the average.



select name

from paintings

where listed_price>(select avg(listed_price) from paintings);

	name
Þ	pretty woman
	Handsome man
	cool painting





Q.2]We want to list all collectors who purchased paintings from our gallery.

select first_name,last_name from collectors
inner join sales

on sales.collector_id=collectors.id;

	fname	Iname
>	Steve	Stevenson
	Laura	Fisher
	Laura	Fisher
	Christina	Buffet







Q.3]We want to see the total amount of sales for each artist who has sold at least one painting in our gallery.

```
select
first_name,last_name,sum(sales_price) from sales
inner join artist
on sales.artist_id=artist.id
group by first_name,last_name
having count(artist_id)>0;
```

	first_name	last_name	sum(sales_price)
>	Kate	Smith	4800
	Thomas	Black	300
	Zika	Wein	4250







Q.4]We want to calculate the number of paintings purchased through our gallery.

select name as 'list of purchased paintings' from paintings
inner join sales
on paintings.id=sales.painting_id;

	list of purchased paintings	
Þ	pretty woman	
	Handsome man	
	Mirade	
	cool painting	
	Barbie	
	Black square#1000	







Q.5]We want to show the first names and the last names of the artists who had zero sales with our gallery.

select first_name,last_name from artist
where id not in(select artist_id from sales);







Q.6]Find painting name who has lowest listing price.



select name from paintings

where listed_price in (select min(listed_price) from paintings);

name

Black square #1000





Q.7]Find painting id whose sales happens between 1st-nov 2021 to 15th-nov 2021.

```
select painting_id from sales
where date between '2021-11-1' and '2021-11-15';
```

	painting_id
Þ	13
	14
	11
	16







Q.8]Show painting details whose name ends with 'n'.

select * from paintings where name like '%n';

	id	name	artist_id	listed_price
>	13	pretty woman	2	2800
	14	Handsome man	2	2300





Q.9]Display collectors id whose name is 'Laura'.

select id from collectors where first_name = 'Laura';









Q.10]Find sales details of artists whose id is 2.

select * from sales where artist_id=2;

of and Amer

	id	date	painting_id	artist_id	collector_id	sales_price
Þ	1001	2021-11-01	13	2	104	2500
	1002	2021-11-10	14	2	102	2300







Q.11]Find count of sales happens for collector id 103.

select count(sales_price) from sales where collector_id=103;



count(sales_price)

) 3





Q.12]Update artists name of artists id 3 set first name as 'Zika'.

update artist
set first_name='Zika'
where id=3;

	id	first_name	Last_name
١	1	Thomas	Black
	2	Kate	Smith
	3	Zika	Wein
	4	Francesco	Benelli







Q.13]Change column name of collectors set first_name to fname and last_name to lname.

alter table collectors change first_name fname varchar(20); alter table collectors change Last_name lname varchar(20);

	id	fname	Iname	
Þ	101	Brandon	Cooper	
	102	Laura	Fisher	
	103	Christina	Buffet	
	104	Steve	Stevenson	
	RULL	HULL	NULL	





Q.14]Delete painting details whose id is 18.

delete from paintings where id=18;

	id	name	artist_id	listed_price
>	11	Mirade	1	300
	12	Sunshine	1	700
	13	pretty woman	2	2800
_	14	Handsome man	2	2300
	15	Barbie	3	250
	16	cool painting	3	5000
	17	Black square #1000	3	50
	RULL	NULL	NULL	HULL







Q.15]Delete complete data of sales.

truncate sales;

id	date	painting_id	artist_id	collector_id	sales_price
NULL	HULL	NULL	HULL	HULL	RULL







