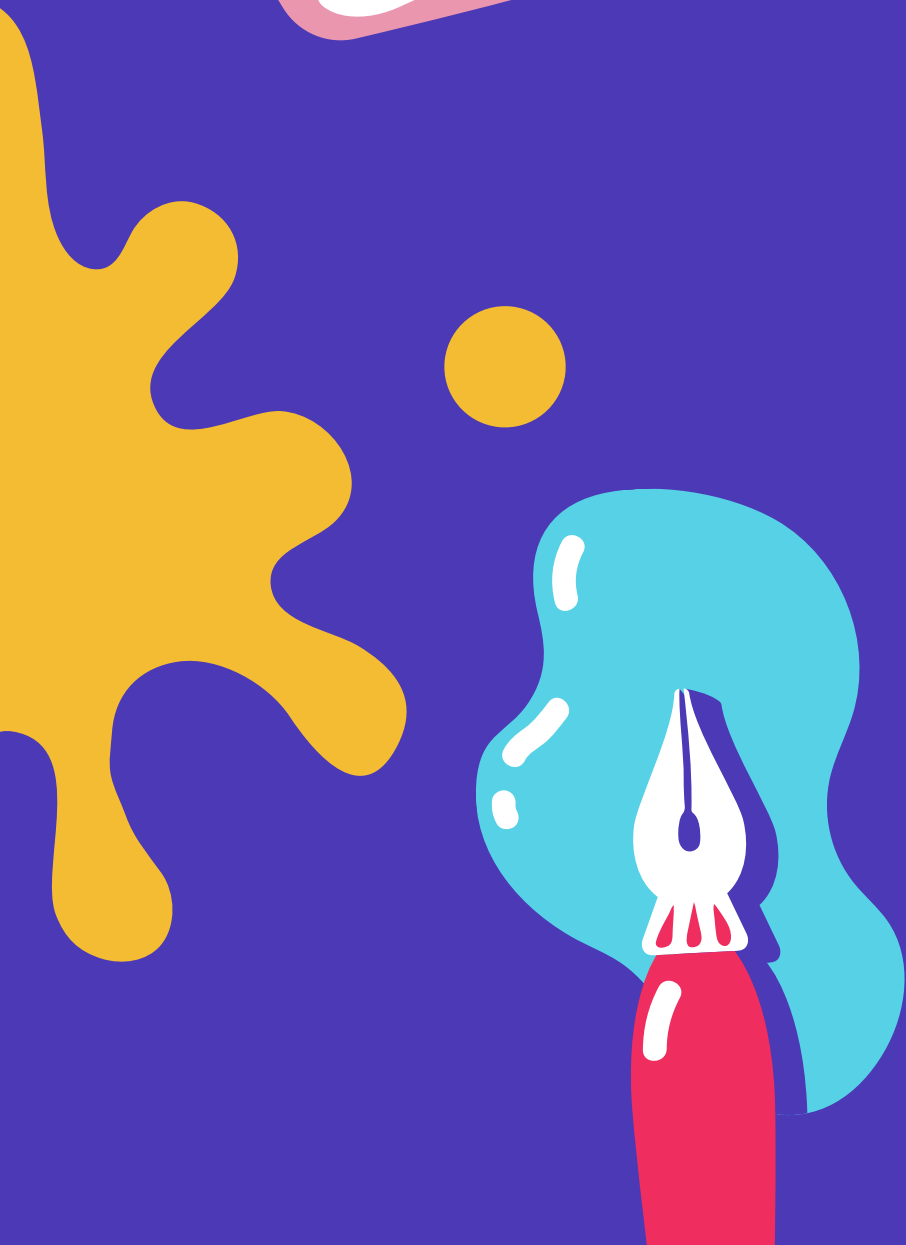




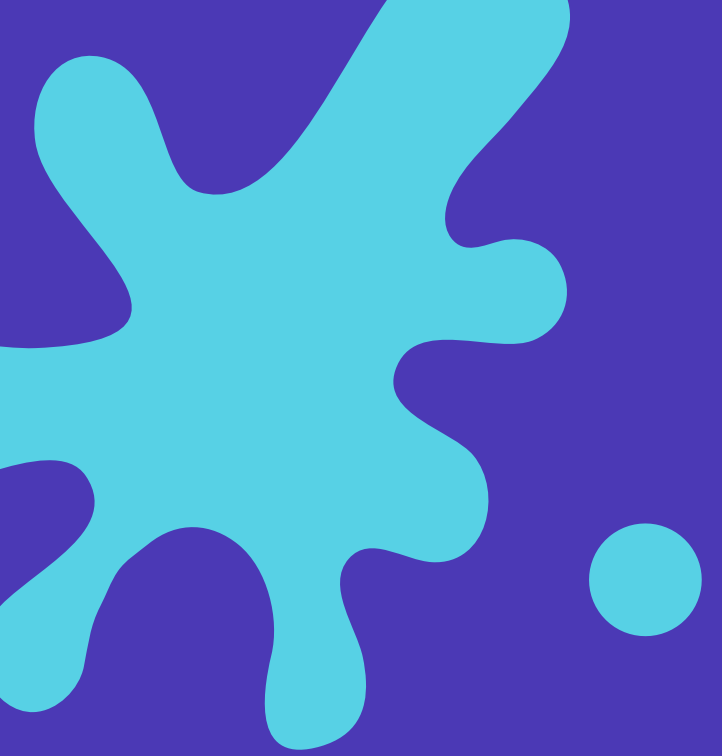
# PAINTINGS

*By Namrata Dutta*

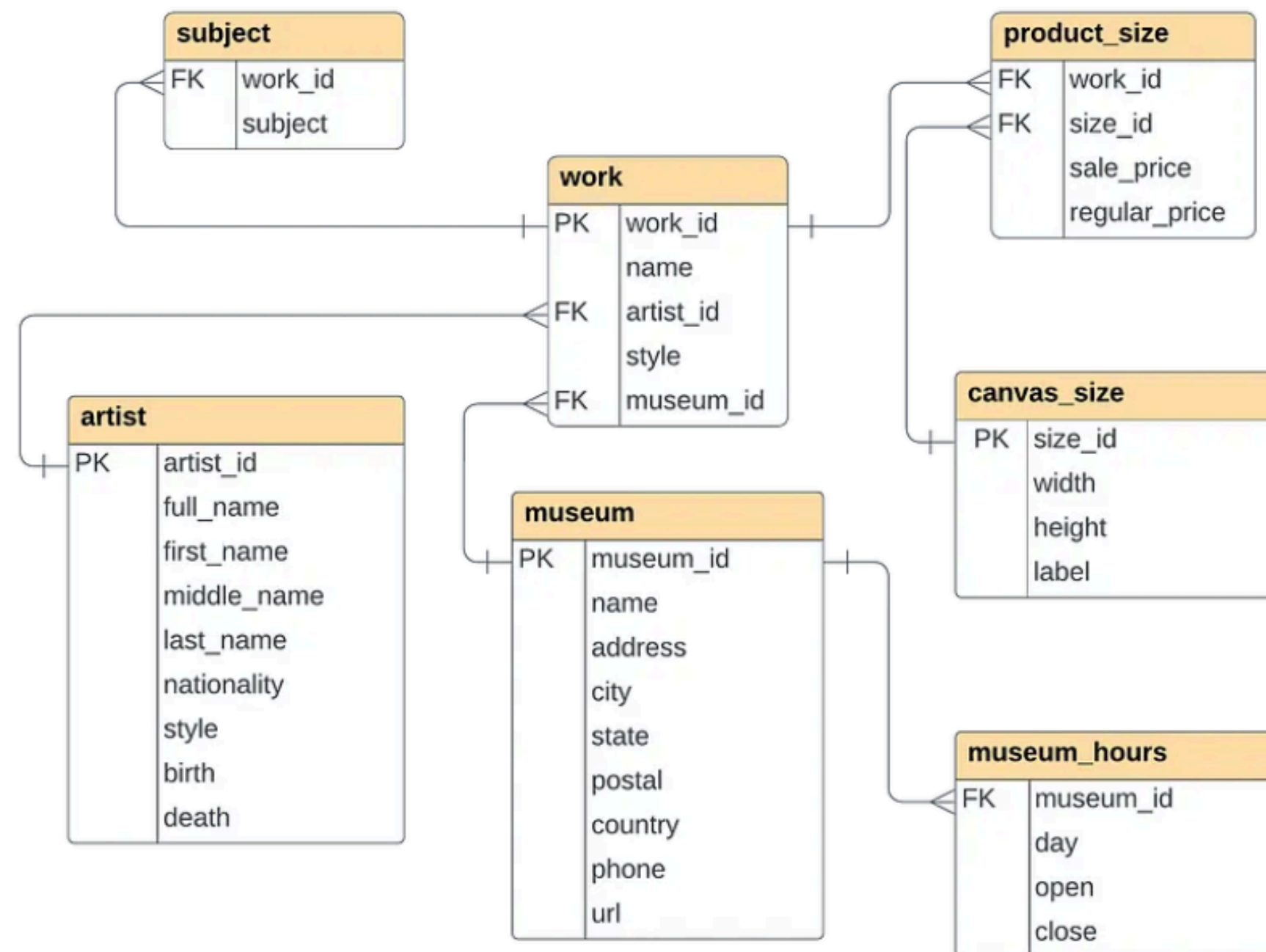


# Introduction

Discover the exciting world of famous paintings and their artists with our dataset. This collection is perfect for students learning SQL, offering fun and interesting challenges. By working with this data, you can improve your SQL skills while learning about great artworks. Whether finding the most popular artists or exploring museum collections, this dataset makes learning both educational and enjoyable.







# Data Modeling







How many paintings have an asking price of more than their regular price?

```
SELECT COUNT(*)  
FROM product_size  
WHERE sale_price > regular_price;
```

Result Grid			 Filter Rows: <input type="text"/>	Export: 	Wrap Cell Content: 
	COUNT(*)				
▶	0				

Identify the paintings whose asking price is less than 50% of its regular price

```
SELECT w.*
FROM work w
JOIN product_size ps ON w.work_id = ps.work_id
WHERE ps.sale_price < 0.5 * ps.regular_price;
```

Result Grid     Filter Rows: <input type="text"/>   Export:    Wrap Cell Content: 					
	work_id	name	artist_id	style	museum_id
▶	31780	Portrait of Madame Labille-Guyard and Her Pupils	621	Neo-Classicism	35
	31780	Portrait of Madame Labille-Guyard and Her Pupils	621	Neo-Classicism	35
	31780	Portrait of Madame Labille-Guyard and Her Pupils	621	Neo-Classicism	35
	31780	Portrait of Madame Labille-Guyard and Her Pupils	621	Neo-Classicism	35
	198417	Disrobing of Christ (Espolio)	553	Renaissance	51
	198417	Disrobing of Christ (Espolio)	553	Renaissance	51
	31974	Taking the Census	525	American Art	35





## Which canva size costs the most?

```
SELECT cs.size_id, MAX(ps.sale_price) AS max_price
FROM canvas_size cs
JOIN product_size ps ON cs.size_id = ps.size_id
GROUP BY cs.size_id
ORDER BY max_price DESC
LIMIT 1;
```

Result Grid			Filter Rows:	Export:	Wrap Cell Content:	Fetch rows:
	size_id	max_price				
▶	4896	1115				

Which are the top 5 most popular museum? (Popularity is defined based on most no of paintings in a museum)

```
SELECT m.museum_id, m.name, COUNT(w.work_id) AS painting_count
FROM museum m
JOIN work w ON m.museum_id = w.museum_id
GROUP BY m.museum_id, m.name
ORDER BY painting_count DESC
LIMIT 5;
```

Result Grid     Filter Rows: <input type="text"/>   Export:    Wrap Cell Content: 			
	museum_id	name	painting_count
▶	35	The Metropolitan Museum of Art	345
	43	Rijksmuseum	284
	47	National Gallery	173
	46	National Gallery of Art	112
	53	Cleveland Museum Of Art	90

Who are the top 5 most popular artist? (Popularity is defined based on most no of paintings done by an artist)

```
SELECT a.artist_id, a.full_name, COUNT(w.work_id) AS painting_count
FROM artist a
JOIN work w ON a.artist_id = w.artist_id
GROUP BY a.artist_id, a.full_name
ORDER BY painting_count DESC
LIMIT 5;
```

Result Grid				Filter Rows:		Export:	Wrap Cell Content:	Fetch rows:
	artist_id	full_name	painting_count					
▶	550	Claude Monet	45					
	826	Jean Baptiste Vanmour	30					
	812	Jan Steen	28					
	900	Francesco Guardi	28					
	706	Anton Raphael Mengs	27					



# Identify the artist and the museum where the most expensive and least expensive painting is placed

## Display the artist name, sale\_price, painting name, museum name, museum city and canvas label

```
1  WITH most_expensive AS (  
2      SELECT w.work_id, ps.sale_price, 'Most Expensive' AS price_category  
3      FROM work w  
4      JOIN product_size ps ON w.work_id = ps.work_id  
5      ORDER BY ps.sale_price DESC  
6      LIMIT 1  
7  ),  
8  least_expensive AS (  
9      SELECT w.work_id, ps.sale_price, 'Least Expensive' AS price_category  
10     FROM work w  
11     JOIN product_size ps ON w.work_id = ps.work_id  
12     ORDER BY ps.sale_price ASC  
13     LIMIT 1  
14 ),  
15 combined AS (  
16     SELECT * FROM most_expensive  
17     UNION ALL  
18     SELECT * FROM least_expensive  
19 )  
20 SELECT a.full_name AS artist_name, c.sale_price, w.name AS painting_name,  
21        m.name AS museum_name, m.city AS museum_city, cs.label AS canvas_label,  
22        c.price_category  
23 FROM combined c  
24 JOIN work w ON c.work_id = w.work_id  
25 JOIN artist a ON w.artist_id = a.artist_id  
26 JOIN museum m ON w.museum_id = m.museum_id  
27 JOIN product_size ps ON w.work_id = ps.work_id  
28 JOIN canvas_size cs ON ps.size_id = cs.size_id;
```

Result Grid							
Filter Rows:		Export:		Wrap Cell Content: <span>IA</span>			
artist_name	sale_price	painting_name	museum_name	museum_city	canvas_label	price_category	
AdÃ©laÃ©de Labille-Guiard	10	Portrait of Madame Labille-Guyard and Her Pupils	The Metropolitan Museum of Art	New York	30" Long Edge	Least Expensive	
AdÃ©laÃ©de Labille-Guiard	10	Portrait of Madame Labille-Guyard and Her Pupils	The Metropolitan Museum of Art	New York	36" Long Edge	Least Expensive	
AdÃ©laÃ©de Labille-Guiard	10	Portrait of Madame Labille-Guyard and Her Pupils	The Metropolitan Museum of Art	New York	48" x 72"(122 cm x 183 cm)	Least Expensive	
AdÃ©laÃ©de Labille-Guiard	10	Portrait of Madame Labille-Guyard and Her Pupils	The Metropolitan Museum of Art	New York	40" x 60"(102 cm x 152 cm)	Least Expensive	
AdÃ©laÃ©de Labille-Guiard	10	Portrait of Madame Labille-Guyard and Her Pupils	The Metropolitan Museum of Art	New York	36" x 54"(91 cm x 137 cm)	Least Expensive	
AdÃ©laÃ©de Labille-Guiard	10	Portrait of Madame Labille-Guyard and Her Pupils	The Metropolitan Museum of Art	New York	30" x 46"(76 cm x 117 cm)	Least Expensive	
AdÃ©laÃ©de Labille-Guiard	10	Portrait of Madame Labille-Guyard and Her Pupils	The Metropolitan Museum of Art	New York	24" x 36"(61 cm x 91 cm)	Least Expensive	
AdÃ©laÃ©de Labille-Guiard	10	Portrait of Madame Labille-Guyard and Her Pupils	The Metropolitan Museum of Art	New York	30" Long Edge	Least Expensive	
AdÃ©laÃ©de Labille-Guiard	10	Portrait of Madame Labille-Guyard and Her Pupils	The Metropolitan Museum of Art	New York	36" Long Edge	Least Expensive	
Gerard Van Honthorst	1055	Shepherd Playing the Flute, and Four Shepherd...	Rijksmuseum	Amsterdam	96" x 48"(244 cm x 122 cm)	Most Expensive	
Gerard Van Honthorst	1055	Shepherd Playing the Flute, and Four Shepherd...	Rijksmuseum	Amsterdam	80" x 40"(203 cm x 102 cm)	Most Expensive	
Gerard Van Honthorst	1055	Shepherd Playing the Flute, and Four Shepherd...	Rijksmuseum	Amsterdam	72" x 36"(183 cm x 91 cm)	Most Expensive	
Gerard Van Honthorst	1055	Shepherd Playing the Flute, and Four Shepherd...	Rijksmuseum	Amsterdam	60" x 30"(152 cm x 76 cm)	Most Expensive	
Gerard Van Honthorst	1055	Shepherd Playing the Flute, and Four Shepherd...	Rijksmuseum	Amsterdam	48" x 24"(122 cm x 61 cm)	Most Expensive	
Gerard Van Honthorst	1055	Shepherd Playing the Flute, and Four Shepherd...	Rijksmuseum	Amsterdam	30" Long Edge	Most Expensive	

# Which country has the 5th highest no of paintings?

```
SELECT country, painting_count
FROM (
    SELECT m.country, COUNT(w.work_id) AS painting_count
    FROM museum m
    JOIN work w ON m.museum_id = w.museum_id
    GROUP BY m.country
    ORDER BY painting_count DESC
    LIMIT 5
) AS ranked_paintings
ORDER BY painting_count ASC
LIMIT 1;
```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:	Fetch rows:
	country	painting_count		
▶	Spain	81		





# Which are the 3 most popular and 3 least popular painting styles?

```
WITH popular_styles AS (  
    -- Most Popular Painting Styles  
    SELECT style, COUNT(work_id) AS painting_count  
    FROM work  
    GROUP BY style  
    ORDER BY painting_count DESC  
    LIMIT 3  
,  
unpopular_styles AS (  
    -- Least Popular Painting Styles  
    SELECT style, COUNT(work_id) AS painting_count  
    FROM work  
    GROUP BY style  
    ORDER BY painting_count ASC  
    LIMIT 3  
)  
SELECT style, painting_count, 'Most Popular' AS category  
FROM popular_styles  
UNION ALL  
SELECT style, painting_count, 'Least Popular' AS category  
FROM unpopular_styles;
```

Result Grid				Filter Rows:	Export:	Wrap Cell Content:
	style	painting_count	category			
▶	Baroque	335	Most Popular			
	Impressionism	240	Most Popular			
		233	Most Popular			
	Surrealism	1	Least Popular			
	Art Nouveau	4	Least Popular			
	Naturalism	5	Least Popular			

Identify the museums which are open on both Sunday and Monday. Display

```
select m.name as museum_name, m.city
from museum_hours mh1
join museum m on m.museum_id = mh1.museum_id
where day = 'Sunday'
) and exists (select 1 from museum_hours mh2
              where mh2.museum_id = mh1.museum_id
              and mh2.day = 'Monday')
```

Result Grid     Filter Rows: <input type="text"/>   Export:    Wrap Cell Content: 		
	museum_name	city
►	The Museum of Modern Art	New York
	Pushkin State Museum of Fine Arts	Moscow
	National Gallery of Victoria	Melbourne
	The Metropolitan Museum of Art	New York
	Museum of Grenoble	38000
	Nelson-Atkins Museum of Art	Kansas City
	Musée du Louvre	75001

Which museum is open for the longest during a day. Display museum name, state and hours open and which day?

```
SELECT m.name, m.state, mh.day,  
       (TIMESTAMPDIFF(MINUTE, STR_TO_DATE(mh.open, '%h:%i:%p'), STR_TO_DATE(mh.close, '%h:%i:%p'))) / 60 AS hours_open  
FROM museum_hours mh  
JOIN museum m ON mh.museum_id = m.museum_id  
ORDER BY hours_open DESC  
LIMIT 1;
```

Result Grid					Filter Rows:	Export:	Wrap Cell Content:	Fetch rows:
	name	state	day	hours_open				
▶	Musée du Louvre	Paris	Friday	12.7500				

# Conclusion

In conclusion, this dataset of famous paintings and their artists offers a fascinating glimpse into the art world through data analysis. By leveraging SQL queries, we uncovered valuable insights, such as identifying popular and less popular painting styles, determining the most and least expensive paintings, and understanding the geographical distribution of artworks. This project highlights the powerful intersection of art and data, providing a rich resource for both artistic appreciation and analytical exploration.

*Thank  
you!*