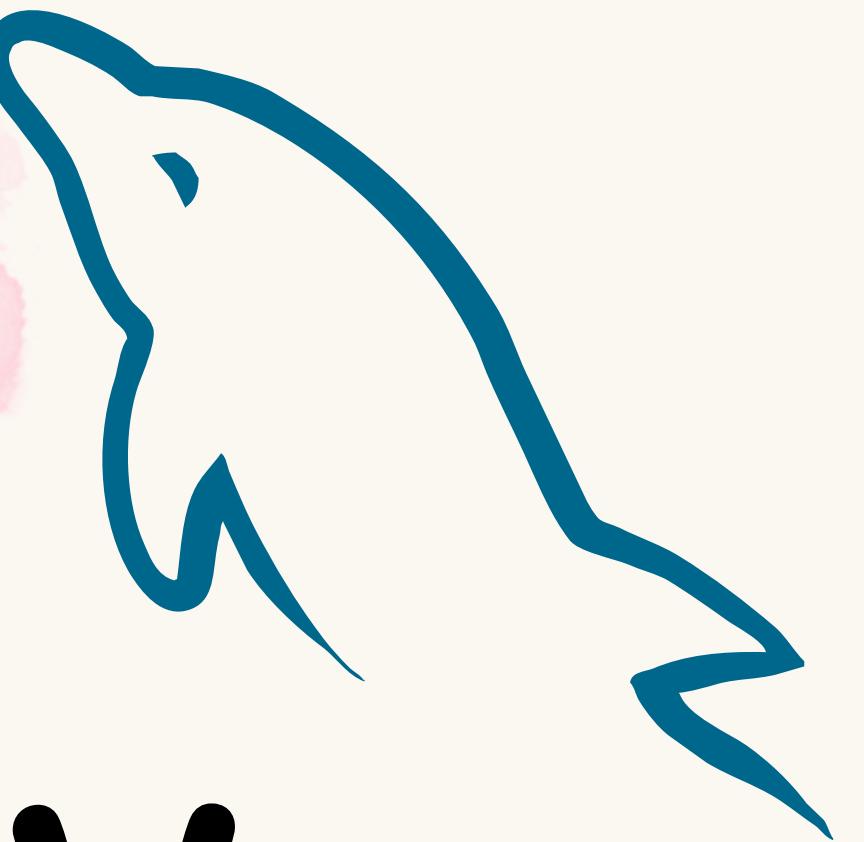
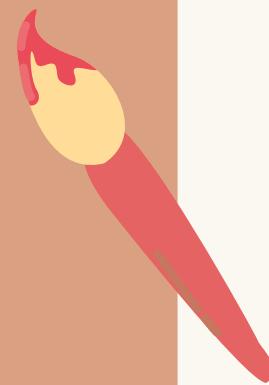


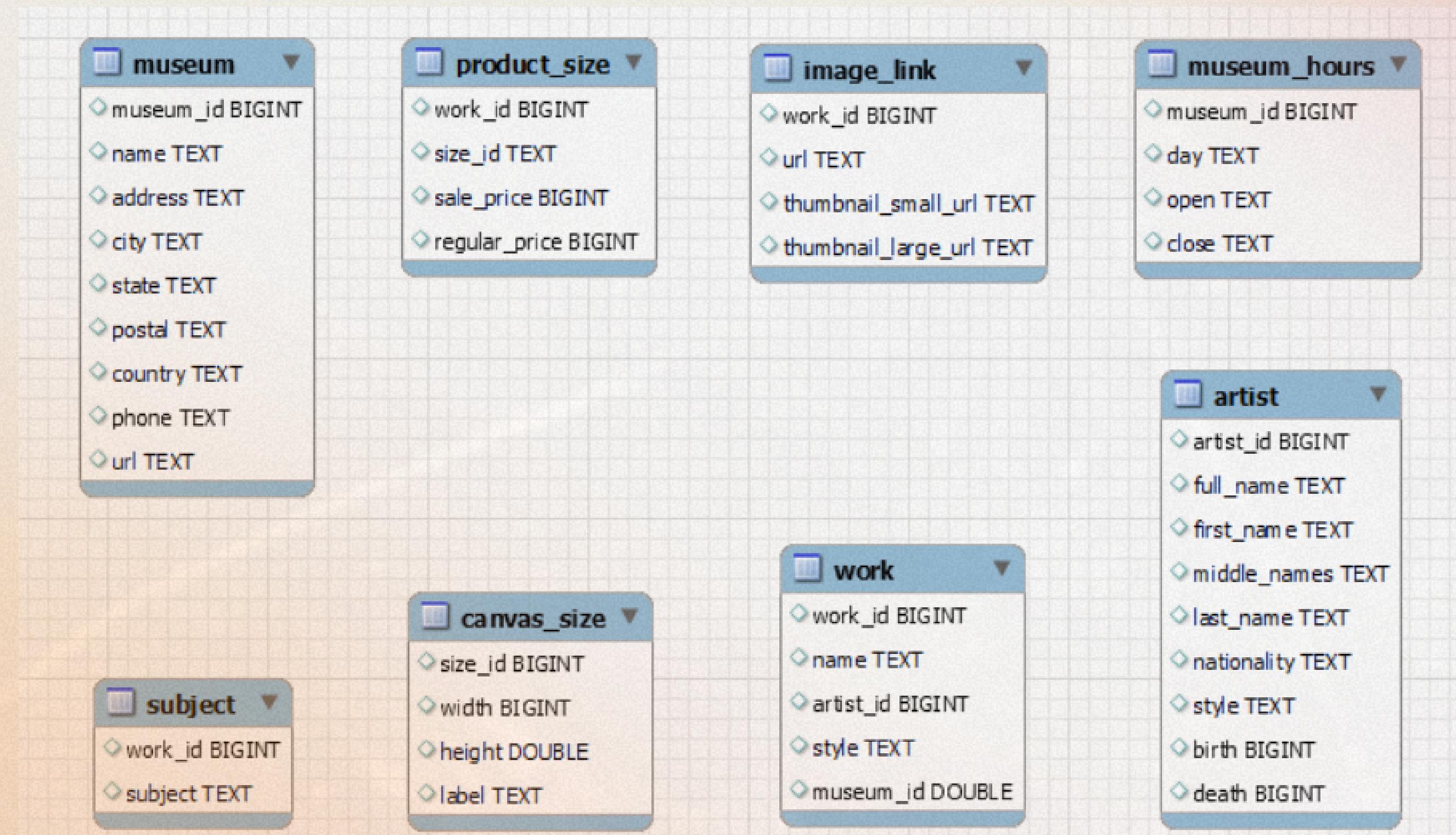
Paintings CASE STUDY



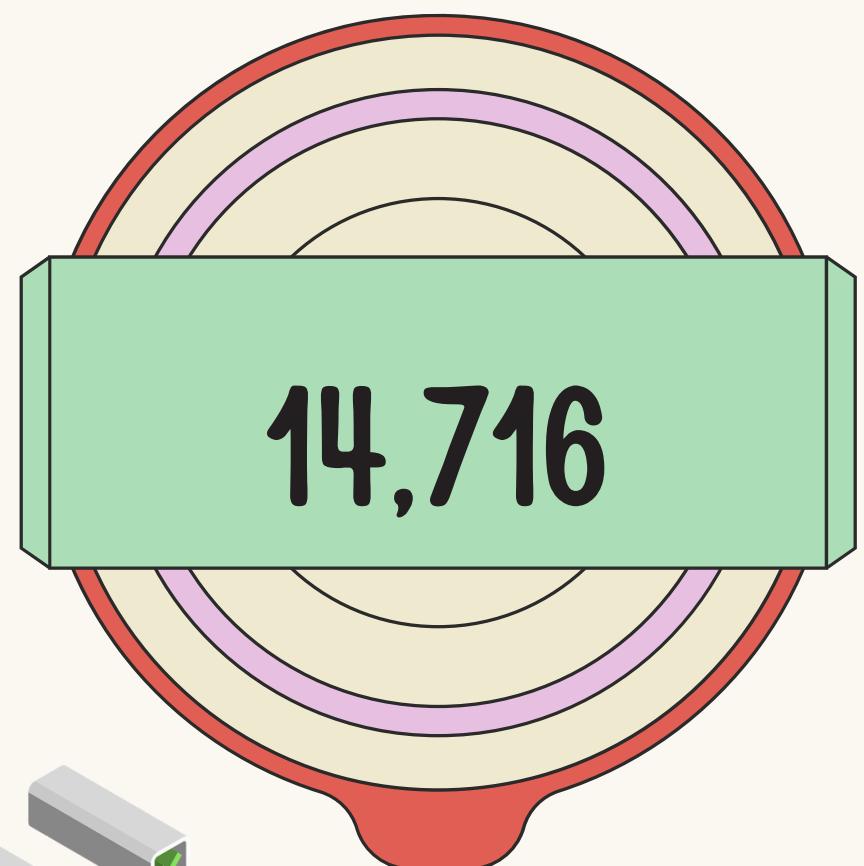
Tables

1. *artist*
2. *canvas_size*
3. *image_link*
4. *museum*
5. *museum_hours*
6. *product_size*
7. *subject*
8. *work*

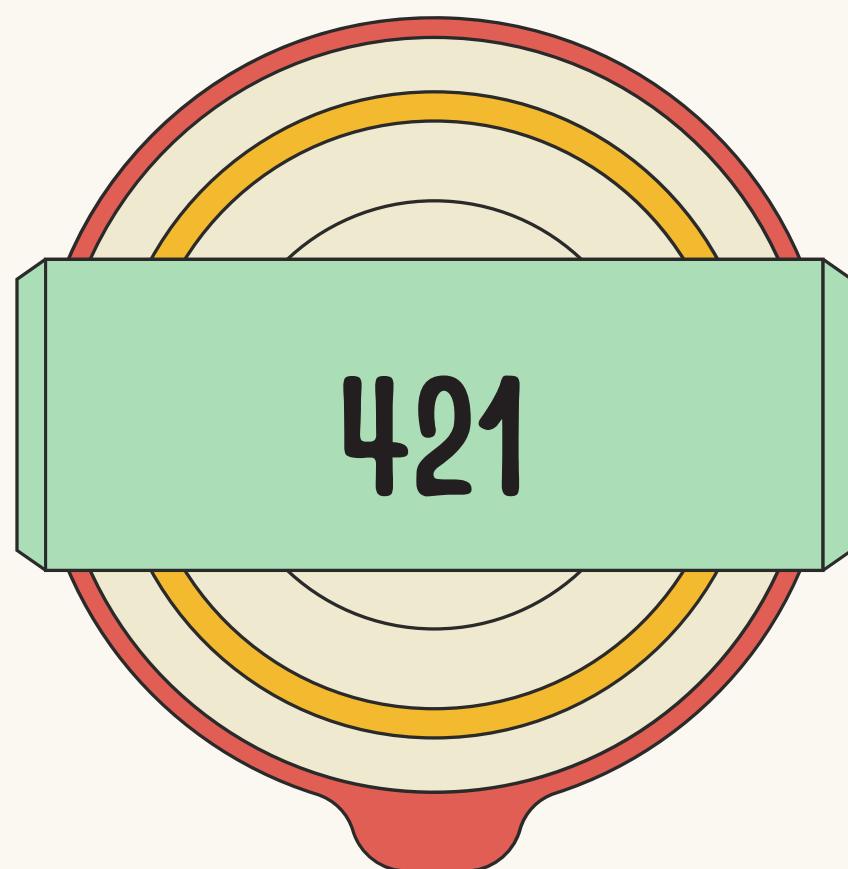




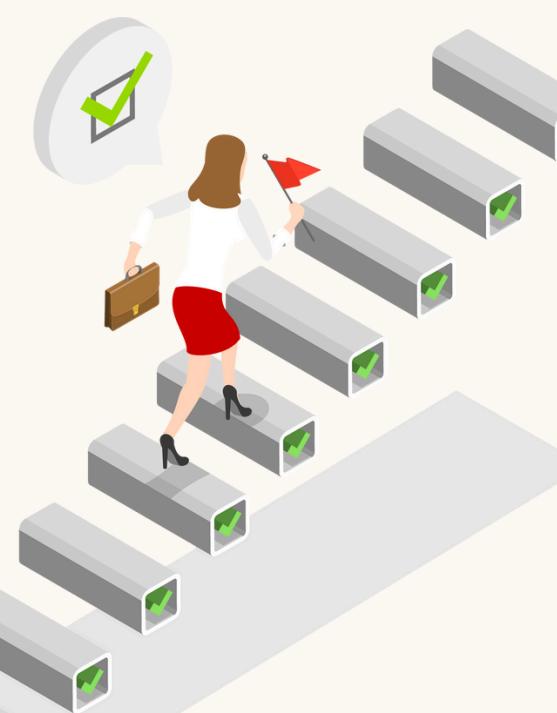
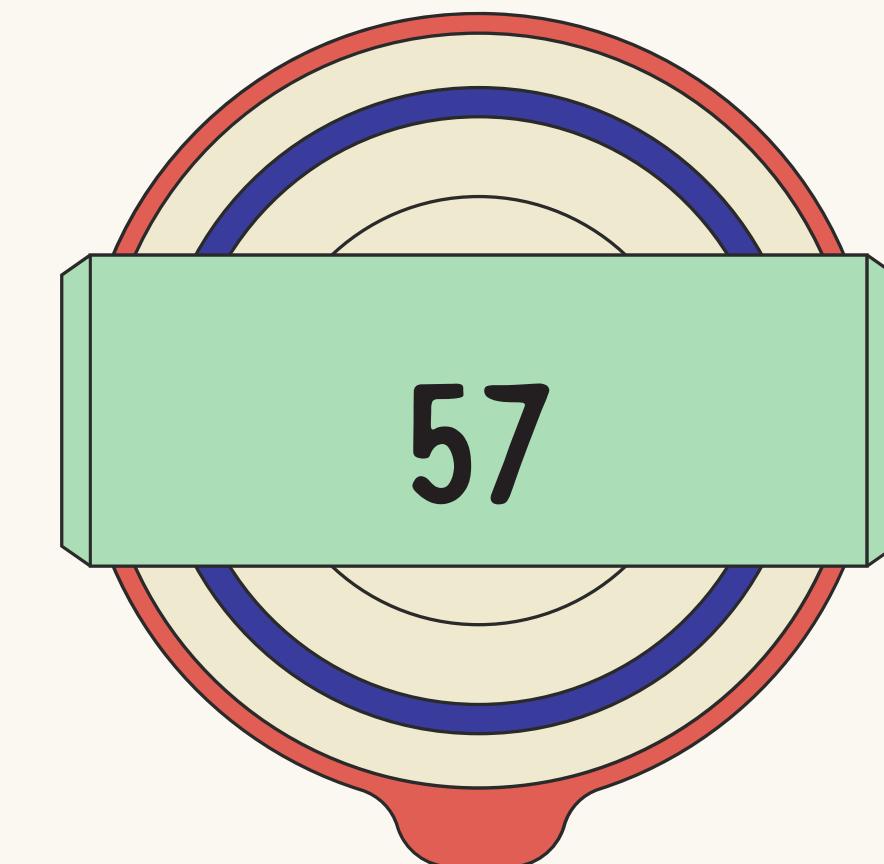
**Total
paintings**



**Total
artists**



**Total
museums**



Fetch the top 3 most famous painting subject.

```
SELECT  
    s.subject, COUNT(*) AS num_paintings  
FROM  
    work AS w  
        JOIN  
    subject AS s ON w.work_id = s.work_id  
GROUP BY s.subject  
ORDER BY num_paintings DESC  
LIMIT 3;
```

subject	num_paintings
Portraits	1070
Abstract/Modern Art	575
Nude	525

Find the most expensive painting.

```
SELECT  
    w.work_id, w.name, ps.regular_price  
FROM  
    work AS w  
        JOIN  
    product_size AS ps ON w.work_id = ps.work_id  
ORDER BY ps.regular_price DESC  
LIMIT 1;
```

work_id	name	regular_price
133971	A Street in Paris in May 1871	2235

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

```
SELECT DISTINCT
    w.work_id,
    w.name,
    ps.size_id,
    ps.sale_price,
    ps.regular_price
FROM
    work AS w
        JOIN
    product_size AS ps ON w.work_id = ps.work_id
WHERE
    ps.sale_price < (ps.regular_price * 0.5);
```

work_id	name	size_id	sale_price	regular_price
31780	Portrait of Madame Labille-Guyard and Her Pupils	36	10	125
31780	Portrait of Madame Labille-Guyard and Her Pupils	30	10	95
198417	Disrobing of Christ (Espolio)	36	30	125
198417	Disrobing of Christ (Espolio)	30	30	95
31974	Taking the Census	24	30	85
17351	The Chalon Family in London	24	10	85
17351	The Chalon Family in London	30	10	95
17351	The Chalon Family in London	36	10	125
30947	Ducks Resting in Sunshine	3024	285	575
30947	Ducks Resting in Sunshine	3226	305	645
23710	Portrait of Mr. and Mrs. Thomas Mifflin (Sarah M...	30	20	95
23710	Portrait of Mr. and Mrs. Thomas Mifflin (Sarah M...	24	20	85

Which canva size costs the most?

```
SELECT  
    cs.label, ps.regular_price  
FROM  
    canvas_size AS cs  
        JOIN  
    product_size AS ps ON cs.size_id = ps.size_id  
GROUP BY cs.label , ps.regular_price  
ORDER BY ps.regular_price DESC  
LIMIT 1;
```

label	regular_price
48" x 96"(122 cm x 244 cm)	2045

Identify the museums with invalid city information in the given dataset.

```
SELECT  
    museum_id, name, city  
FROM  
    museum  
WHERE  
    city REGEXP '^+[0-9]+'
```

museum_id	name	city
34	The State Hermitage Museum	2
36	Museum Folkwang	45128
37	Museum of Grenoble	38000
38	Musée des Beaux-Arts de Quimper	29000
40	Musée du Louvre	75001
74	Kröller-Müller Museum	6731 AW Otterlo

Identify the museums which are open on weekend, and 12:00 pm onwards.

SELECT

name, city, day, open

FROM

museum

JOIN

museum_hours ON museum.museum_id = museum_hours.museum_id

WHERE

day IN ('sunday' , 'saturday')

AND open >= '12:00:PM';

name	city	day	open
Museum of Fine Arts, Houston	Houston	Sunday	12:30:PM
Kimbell Art Museum	Fort Worth	Saturday	12:00:PM
Kimbell Art Museum	Fort Worth	Sunday	12:00:PM
Chrysler Museum of Art	Norfolk	Sunday	12:00:PM
Norton Simon Museum	Pasadena	Saturday	12:00:PM
Norton Simon Museum	Pasadena	Sunday	12:00:PM

How many museums are open every single day?

SELECT

day, COUNT(museum_id) AS total_museums

FROM

museum_hours

GROUP BY day;

day	total_museums
Sunday	56
Monday	29
Tuesday	43
Wednesday	51
Thursday	57
Friday	57
Saturday	58

Who are the top 5 most popular artist?

```
SELECT  
    full_name, COUNT(*) AS total_paintings  
FROM  
    artist  
        INNER JOIN  
            work ON artist.artist_id = work.artist_id  
GROUP BY full_name  
ORDER BY total_paintings DESC  
LIMIT 5;
```

full_name	total_paintings
Pierre-Auguste Renoir	469
Claude Monet	378
Vincent Van Gogh	308
Maurice Utrillo	253
Albert Marquet	233

Which country has the 5th highest no of paintings?

```
SELECT  
    m.country, COUNT(*) AS total_paintings  
FROM  
    museum AS m  
    JOIN  
    work AS w ON m.museum_id = w.museum_id  
GROUP BY m.country  
ORDER BY total_paintings DESC  
LIMIT 1 OFFSET 4;
```

country	total_paintings
Spain	196

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

```
> (SELECT
    style,
    COUNT(*) AS total_paintings,
    'most popular' AS remarks
  FROM
    work
  GROUP BY style
  ORDER BY total_paintings DESC
  LIMIT 3) UNION (SELECT
    style,
    COUNT(*) AS total_paintings,
    'least popular' AS remarks
  FROM
    work
  GROUP BY style
  ORDER BY total_paintings ASC
  LIMIT 3);
```

style	total_paintings	remarks
Impressionism	3078	most popular
Post-Impressionism	1672	most popular
NULL	1286	most popular
Japanese Art	70	least popular
Art Nouveau	108	least popular
Avant-Garde	146	least popular

IMPLEMENTED TECHNOLOGIES

