

1. ARE THERE MUSEUEMS WITHOUT ANY PAINTINGS?

```
SELECT

COUNT(*)

FROM

museum AS m

LEFT JOIN

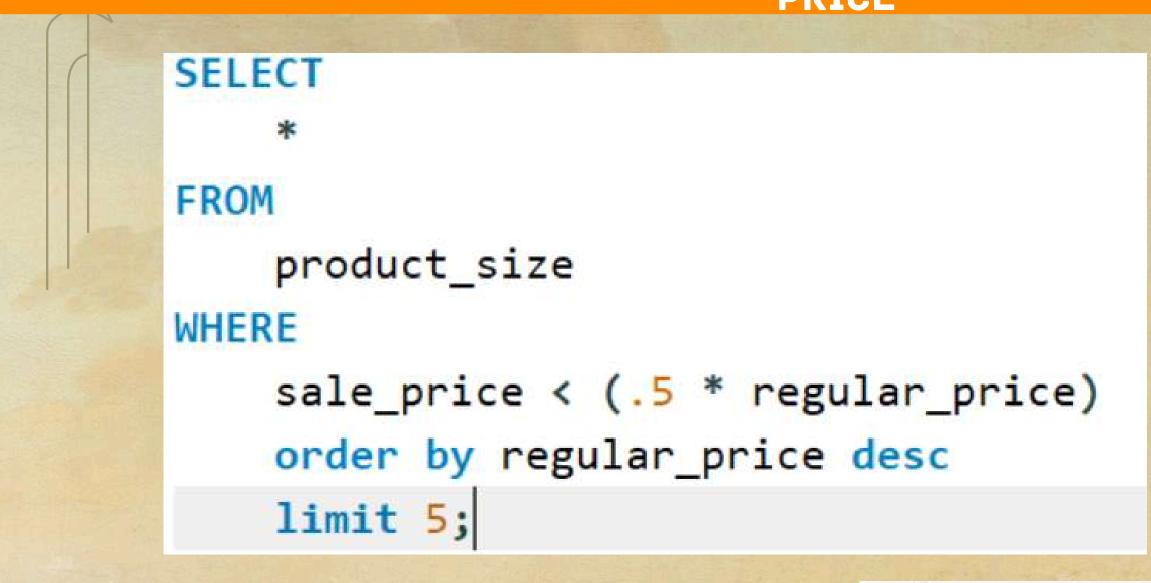
work AS w ON m.museum_id = w.museum_id

WHERE

w.work_id IS NULL;
```



2. IDENTIFY THE PAINTINGS WHOSE ASKING PRICE IS LESS THAN 50% OF ITS REGULAR PRICE



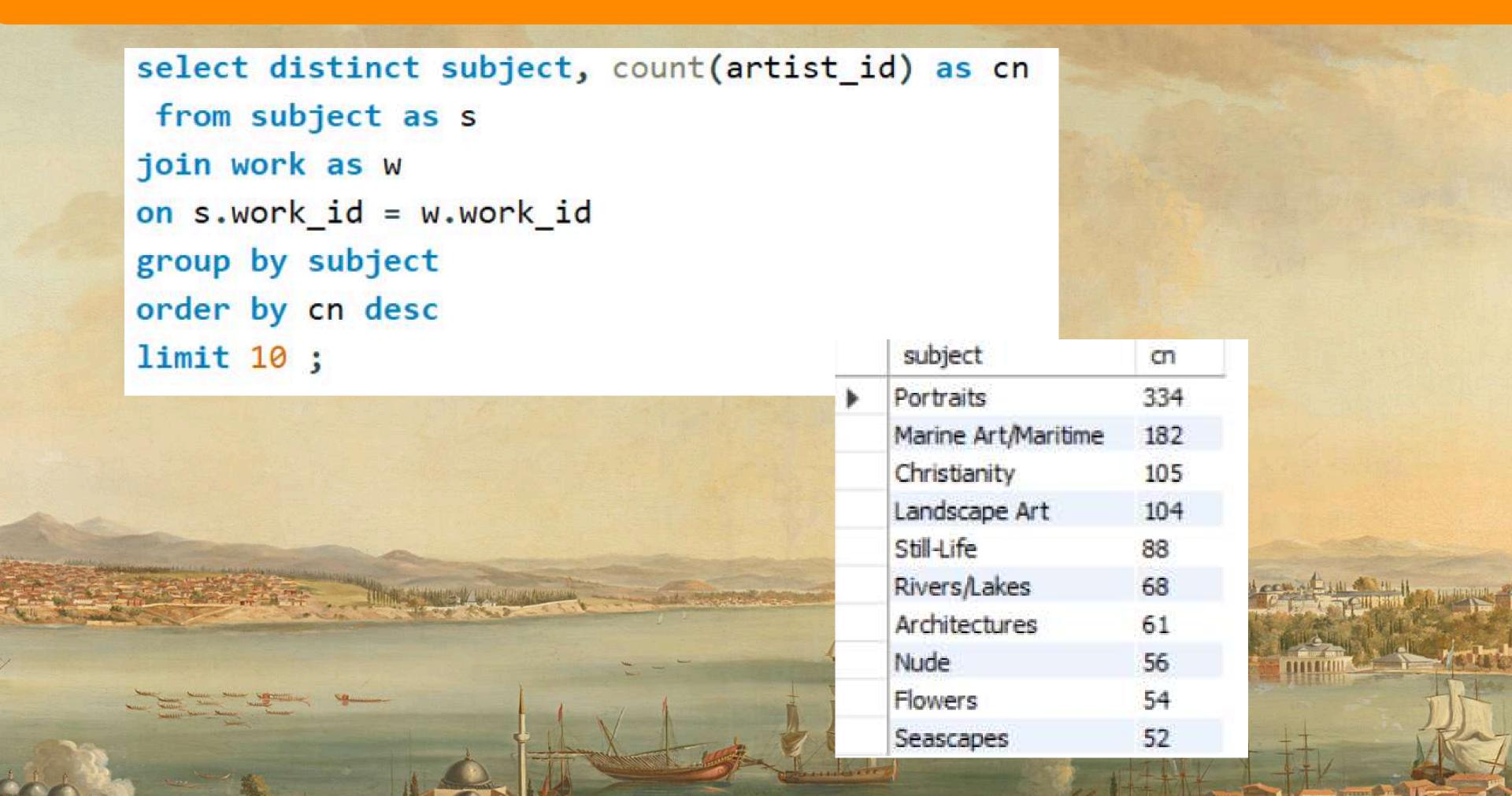
		work_id	size_id	sale_price	regular_price	
	>	190824	6040	635	1275	
The development of the second		961	4060	615	1255	A THE PARTY OF THE
		20084	6040	585	1245	
	-	4703	4848	505	1015	
		4455	4848	505	1015	HAIL THE
					1	# 1

3.WHICH CANVA SIZE COSTS THE MOST?

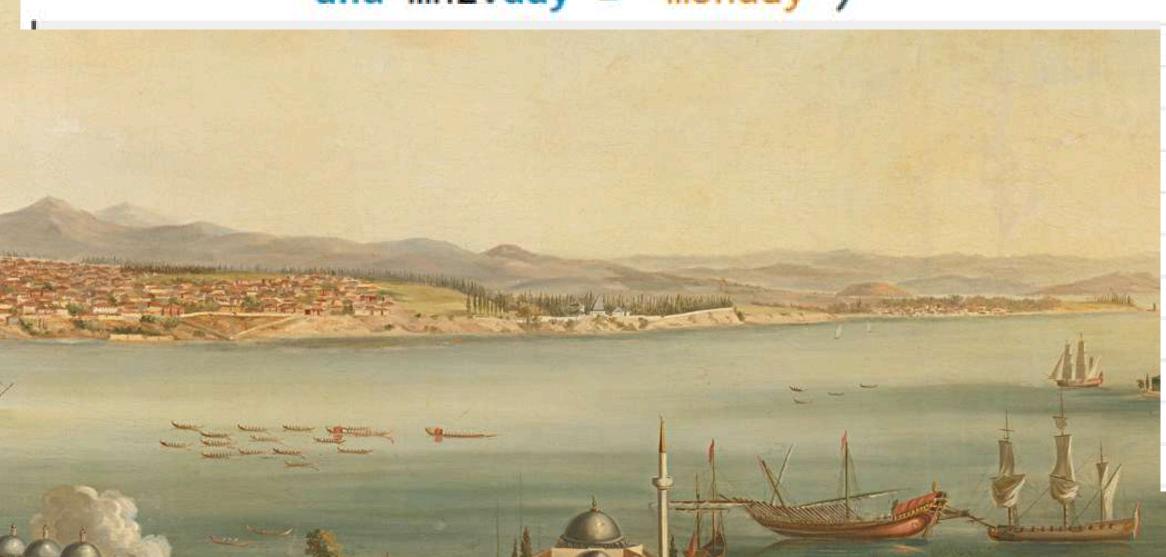
```
select c.label,c.size_id, max(sale_price) as price
from canvas_size as c
left join product_size as p
on c.size_id = p.size_id
group by c.label, c.size_id
order by price desc
limit 1;
```

		label	size_id	price	
	>	48" x 96"(122 cm x 244 cm)	4896	1115	
	THE PROPERTY OF				
		All			THE RESERVE OF THE PARTY OF THE
The same same					

4.FETCH THE TOP 10 MOST FAMOUS PAINTING SUBJECT



5.IDENTIFY THE MUSEUMS WHICH ARE OPEN ON BOTH SUNDAY AND MONDAY. DISPLAY MUSEUM NAME, CITY.



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
National Maritime Museum	London
Museum of Fine Arts Boston	Boston
Rijksmuseum	Amsterdam
Israel Museum	Jerusalem
National Gallery of Art	Washington
National Gallery	London
Mauritshuis Museum	Den Haag
The Prado Museum	Madrid
The Barnes Foundation	Philadelphia

6. WHICH ARE THE TOP 5 MOST POPULAR MUSEUM? (POPULARITY IS

-- DEFINED BASED ON MOST NO OF PAINTINGS IN A MUSEUM)

```
SELECT

m.name, m.museum_id, COUNT(m.museum_id) AS no_of_painting

FROM

museum AS m

LEFT JOIN

work AS w ON m.museum_id = w.museum_id

GROUP BY m.name , m.museum_id

ORDER BY COUNT(*) DESC

LIMIT 5;
```



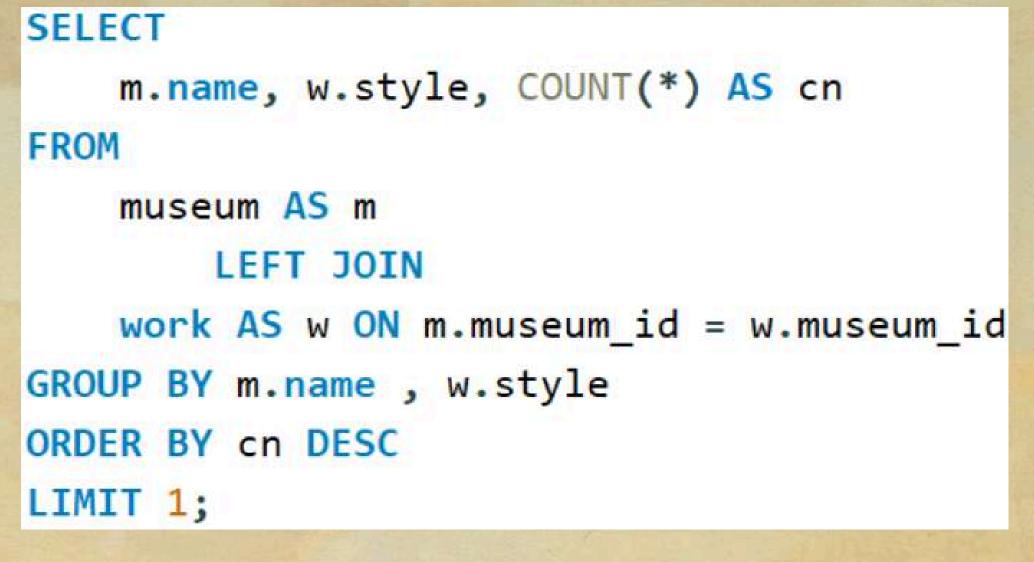
	name	museum_id	no_of_painting
١	The Metropolitan Museum of Art	35	536
	Rijksmuseum	43	352
	National Gallery	47	314
	National Gallery of Art	46	175
	National Maritime Museum	41	131

7. WHO ARE THE TOP 5 MOST POPULAR ARTIST? (POPULARITY IS DEFINED BASED ON MOST NO OF PAINTINGS DONE BY AN ARTIST)

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

	full_name	nationality	no_of_painting
Þ	Peter Paul Rubens	Flemish	56
	Claude Monet	French	45
	Jean Baptiste Vanmour	Flemish	30
	Francesco Guardi	Italian	28
	Jan Steen	Dutch	28

8. WHICH MUSEUM HAS THE MOST NO OF MOST POPULAR PAINTING STYLE?



	name	style	cn	
١	Rijksmuseum	Baroque	153	

9. DISPLAY THE COUNRTY AND THE CITY WITH THE MOST NO OF MUSEUMS.

-- OUTPUT 2 SEPERATE COLUMNS TO MENTION THE CITY AND COUNTRY.

```
with cte_country as (
    SELECT country, count(*) as no_of_museum,
    rank() over (order by count(*) desc) as ranks
    FROM museum
    group by country),
cte_city as (
SELECT city, count(*) as no_of_museum,
rank() over (order by count(*) desc) as ranks
FROM museum
group by city)
select country , city
from cte_country
cross join cte_city
where cte_country.ranks = 1
and cte_city.ranks = 1
```

	country	city
>	USA	New York
	USA	Paris
	USA	Washington
	USA	London

10. IDENTIFY THE ARTISTS WHOSE PAINTINGS ARE DISPLAYED IN MULTIPLE COUNTRIES

```
SELECT
      a.full_name, a.style, m.country, COUNT(*) AS no_of_paintings
FROM
      museum AS m
            JOIN
     work AS w ON m.museum_id = w.museum_id
            JOIN
      artist AS a ON w.artist_id = a.artist_id
GROUP BY a.full_name , a.style , m.country
                                                                     full name
                                                                                        style
                                                                                                     country
                                                                                                               no of paintings
                                                                     Claude Monet
                                                                                       Impressionist
                                                                                                    USA
ORDER BY no_of_paintings DESC;
                                                                     Jean Baptiste Vanmour
                                                                                       Orientalist
                                                                                                    Netherlands
                                                                                                               30
                                                                     Peter Paul Rubens
                                                                                                    USA
                                                                                                               29
                                                                                       Baroque
                                                                     John Singleton Copley
                                                                                       Colonial
                                                                                                    USA
                                                                                                               25
                                                                     Jan Steen
                                                                                                    Netherlands
                                                                                                               25
                                                                                       Baroque
                                                                     Thomas Sully
                                                                                                    USA
                                                                                                               22
                                                                                       Portraitist
                                                                     Ivan Aivazovskiy
                                                                                       Landscape Art
                                                                                                    Russia
                                                                                                               21
                                                                     Anton Raphael Mengs
                                                                                       Neoclassical
                                                                                                    Spain
                                                                                                               20
                                                                     Gilbert Stuart
                                                                                       Portraitist
                                                                                                    USA
                                                                                                               20
                                                                     Nicolas Poussin
                                                                                                    UK
                                                                                                               19
                                                                                       Baroque
                                                                     Francisco De Goya
                                                                                                    Spain
                                                                                                               18
                                                                                       Rococo
                                                                     Cornelis Troost
                                                                                       Rococo
                                                                                                    Netherlands
                                                                                                               17
                                                                     Paul CÃ@zanne
                                                                                       Post-Impressi... USA
                                                                                                               17
```

11.WHICH ARTIST HAS THE MOST NO OF PORTRAITS PAINTINGS OUTSIDE USA?. DISPLAY ARTIST NAME, NO OF PAINTINGS AND THE ARTIST NATIONALITY

```
select a.full_name, a.nationality, count(*) as no_of_paintings
from work w
join artist a on a.artist_id=w.artist_id
join subject s on s.work_id=w.work_id
join museum m on m.museum_id=w.museum_id
where m.country <> 'USA' AND s.subject = 'Portraits'
group by a.full_name, a.nationality
order by count(*) desc
limit 1;
```

	full_name	nationality	no_of_paintings
33.	Jan Willem Pieneman	Dutch	14

12. WHICH COUNTRY HAS THE 5TH HIGHEST NO OF PAINTINGS?*

```
select m.country, count(*) as no_of_pain
from artist a
join work w ON a.artist_id= w.artist_id
join museum m ON m.museum_id = w.museum_id
group by m.country
order by count(*) desc
limit 1
offset 4
```



