SQL FINAL PORTFOLIO PROJECT

# The Data

Import the paintings database, [paintings.tar](https://drive.google.com/open?id=10axLpX_eyTwqPZFFsIuxqKCKxbWbWXde&usp=drive_fs), to Postgres using pgAdmin. Then answer the following questions using SQL. Save the associated queries in a text file.

**1**. What museums have the highest proportion of cubist paintings? What other styles of art do these museums typically display?

Twelve total museums have cubist paintings. The Metropolitan Museum of Art has the highest number of cubist paintings, with 22 total.

**Query:**

-- Query for Museums with cubist paintings

select m.name, count(\*) as total

from public.artist a

inner join public.work w

on a.artist\_id=w.artist\_id

inner join public.museum m

on w.museum\_id=m.museum\_id

where a.style='Cubist'

group by m.name

order by total desc

**Result:**

[Cubist Paintings Query Result](https://docs.google.com/spreadsheets/u/0/d/1N65jO3kCCgfqbWXLd7XHVBUo8Ft16tNM-k_RHscjizU/edit)

The most common art styles that museums typically display are Impressionist, Baroque, Post-Impressionist, Rococo, and Realist.

**Query:**

-- Query for common art styles in Museums

select a.style, count(\*) as total

from public.artist a

inner join public.work w

on a.artist\_id=w.artist\_id

inner join public.museum m

on w.museum\_id=m.museum\_id

group by a.style

order by total desc

**Result:**

[Common Art Styles for Museums](https://docs.google.com/spreadsheets/u/0/d/1KD-dVt7Jd_bHxhOltsTA-XIzH9pArn8Gm-_w3SPFXbU/edit)

**2**. Which artists have their work displayed in museums in many different countries?

There are 194 artist who have their work on display in more than one country. Vincent Van Gogh had the highest, with his artwork being displayed in 8 different countries.

**Query:**

-- Artist work displayed in different countries

select full\_name, count(distinct(country)) as num\_of\_countries

from public.artist a

inner join public.work w

on a.artist\_id=w.artist\_id

inner join public.museum m

on m.museum\_id=w.museum\_id

group by a.full\_name

having count(distinct(country)) > 1

order by num\_of\_countries desc

**Result:**

[Artist work displayed in different countries](https://docs.google.com/spreadsheets/u/0/d/14oltcT1PMfqItDE69WBMzA8NrAgPR-U2QN6YS2KGICI/edit)

**3**. Create a table that shows the most frequently painted subject for each style of painting, how many paintings there were for the most frequently painted subject in that style, how many paintings there are in that style overall, and the percent of paintings in that style with the most frequent subject. Exclude cases where there is no information on the subject of the painting. Format the table and copy it into the google doc.

**Query:**

-- Subject and style

select style\_total, ssc.style, subject, style\_subject\_total,

round(((cast(style\_subject\_total as decimal) / style\_total)\*100),2) as style\_subject\_percentage

from (

select row\_number() over (partition by style order by count(\*) desc) as row\_num,

style, subject,

count(\*) as style\_subject\_total

from public.subject s

inner join public.work w

on s.work\_id=w.work\_id

where style is not null

group by style, subject

order by style, style\_subject\_total desc

) as ssc

inner join (

select style, count(\*) as style\_total

from public.work

group by style

) as sc

on ssc.style=sc.style

where row\_num=1

**Result:**

[Style and Subject Table](https://docs.google.com/spreadsheets/u/0/d/1e67NoxaUWFQmcDI-0O9LbMzhgUEL16IiWB4uXw4ROas/edit)