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

The museums with the highest proportion of cubism paintings are the Solomon R. Guggenheim Museum and the Pushkin State Museum of Fine Arts, with 16.28% and 13.21% of cubism paintings, respectively. It appears that the other popular styles of paintings at these museums are impressionism, expressionism, post-impressionism, and avant-garde.

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

The artists with their work displayed in the most countries are Vincent Van Gogh, with paintings in 8 different countries, and Paul Gauguin and Claude Monet, with both having paintings in 7 countries.

1. 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.

| **painting\_style** | **subject** | **count\_paintings** | **count\_style** | **pct\_of\_top\_subject** |
| --- | --- | --- | --- | --- |
| American Art | Horses | 57 | 461 | 12.36% |
| American Landscape | Landscape Art | 285 | 323 | 88.24% |
| Art Nouveau | Portraits | 14 | 108 | 12.96% |
| Avant-Garde | Still-Life | 12 | 146 | 8.22% |
| Baroque | Christianity | 92 | 972 | 9.47% |
| Classicism | Nude | 37 | 427 | 8.67% |
| Cubism | Still-Life | 46 | 300 | 15.33% |
| Expressionism | Nude | 50 | 673 | 7.43% |
| Fauvism | Flowers | 74 | 653 | 11.33% |
| Impressionism | Rivers/Lakes | 218 | 3078 | 7.08% |
| Japanese Art | Rivers/Lakes | 6 | 70 | 8.57% |
| Nabi | Nude | 37 | 366 | 10.11% |
| Naturalism | Dogs | 10 | 272 | 3.68% |
| Neo-Classicism | Portraits | 104 | 421 | 24.70% |
| Orientalism | Nude | 26 | 402 | 6.47% |
| Pointillism | Nude | 17 | 200 | 8.50% |
| Post-Impressionism | Flowers | 113 | 1672 | 6.76% |
| Realism | Horses | 95 | 1181 | 8.04% |
| Renaissance | Christianity | 99 | 371 | 26.68% |
| Rococo | Portraits | 90 | 535 | 16.82% |
| Romanticism | Horses | 52 | 511 | 10.18% |
| Surrealism | Abstract/Modern Art | 8 | 149 | 5.37% |
| Symbolism | Flowers | 40 | 199 | 20.10% |

Codes:

Question 1:

select a.museum\_id, b.name, avg(case when a.style='Cubism' then 1 else 0 end) percent\_cubism

from work a

inner join museum b on a.museum\_id=b.museum\_id

group by 1,2

order by 3 desc

Question 2:

select c.full\_name, a.artist\_id, count(distinct(b.country)) countries\_displayed

from work a

inner join museum b on a.museum\_id=b.museum\_id

inner join artist c on a.artist\_id=c.artist\_id

group by 1,2

order by 3 desc

Question 3:

select a.painting\_style, a.subject, a.count\_paintings, b.count\_style,

cast(a.count\_paintings as float)/b.count\_style pct\_of\_top\_subject from (

select \* from

(select row\_number() over (partition by a.style order by count(b.subject)desc)

,a.style painting\_style, b.subject, count(b.subject) count\_paintings from work a

inner join subject b on a.work\_id=b.work\_id

where not b.subject is null

group by 2,3) a

where row\_number='1'

) a

inner join (

select a.style painting\_style, count(a.style) count\_style from work a

group by 1

) b on a.painting\_style=b.painting\_style