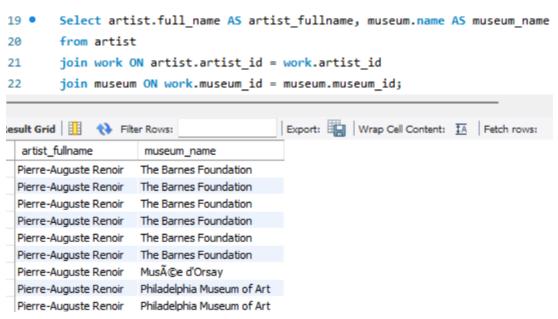
DATA ANALYST

SQL PROJECT2

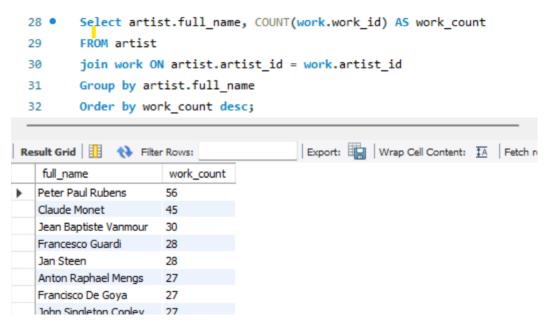
```
-- create database
```

```
-- create database
       create database Painting;
-- use database
       -- use database
       use Painting;
-- show tables
8 •
      show tables;
      select * from artist;
9 • select * from canvas size;
10 • select * from image;
11 • select * from museum;
12 • select * from museum hours;
13 • select * from product_size;
14 • select * from subject;
15 • select * from work;
```

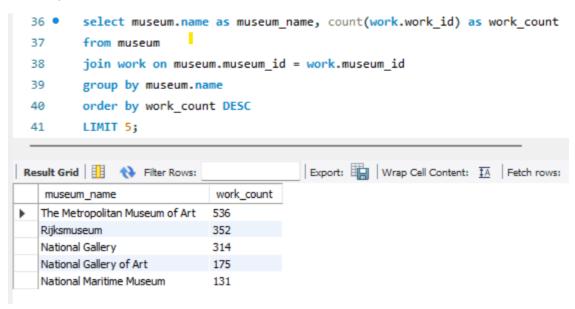
- -- Joining Tables:
- -- 1. Retrieve the full name of artists along with the names of the museums where their works are displayed.



- -- 2. Group By and Count:
- -- How many works does each artist have in the database? Display the artist's full name along with the count of their works, ordered by the count in descending order.



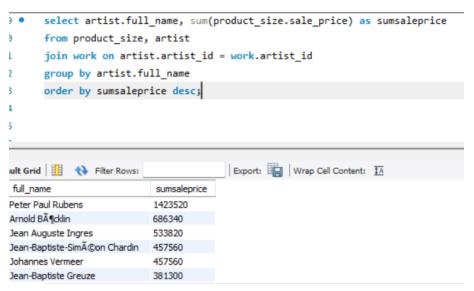
- -- 3. Order By and Limit:
- -- List the top 5 museums with the highest number of works displayed in the database, along with their respective counts.



- -- 4. Join, Order By, and Limit:
- -- Display the names and styles of the works along with the corresponding museum names, ordered by the museum name in ascending order. Limit the results to 10.

```
45 •
          select work.name as work name, work.style as work style, museum.name as museum name
46
          from work
47
          join museum on museum.museum_id = work.museum_id
          group by work.name, work.style, museum.name
48
49
          order by museum.name asc
          limit 10;
Result Grid
               Filter Rows:
                                                 Export: Wrap Cell Content: TA Fetch rows:
   work_name
                                                         museum_name
                                     work_style
                                                        Cleveland Museum Of Art
  Fort George Island, Florida
                                     American Landscape
  Portrait of King Charles II of England
                                                         Cleveland Museum Of Art
                                    Baroque
  Portrait of Charles I
                                    Baroque
                                                         Cleveland Museum Of Art
  Portrait of Mrs Leneve
                                    Baroque
                                                         Cleveland Museum Of Art
  Portrait of Mary Sicard David
                                                         Cleveland Museum Of Art
                                                         Cleveland Museum Of Art
  Lieutenant General Duncan Campbell
                                   Romanticism
   A Calling (Une Vocation)
                                    Classicism
                                                         Cleveland Museum Of Art
   Portrait of Jean Terford David
                                                         Cleveland Museum Of Art
  Wild Boars in the Snow
                                    Realism
                                                         Cleveland Museum Of Art
```

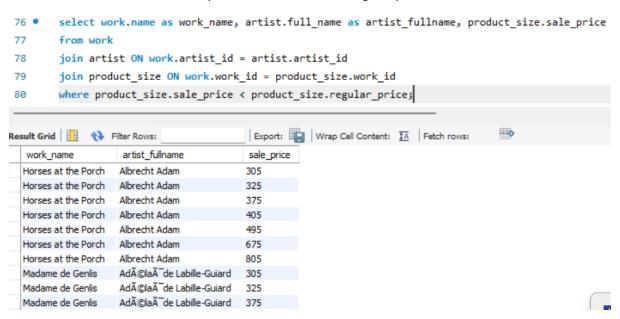
- -- 5.Join, Group By, and Sum:
- -- Show the total sale price for each artist's works. Display the artist's full name along with the total sale price, ordered by the total sale price in descending order.



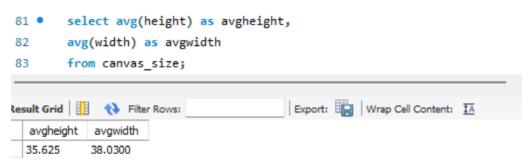
- -- 6. Join, Group By, and Having:
- -- List artists who have more than 3 works in the database, along with the count of their works.

```
64 •
         select artist.full_name as artist_name, count(*) as work_count
         from artist
65
         join work on artist.artist_id = work.artist_id
66
         group by artist.full_name
         having count(*) >3;
68
                                             Export: Wrap Cell Content: IA
Result Grid
              Filter Rows:
   artist_name
                      work_count
  Abraham Mignon
  Adriaan De Lelie
                     15
  Aelbert Cuyp
  Albert André
  Albert Bierstadt
                     11
  Albrecht Durer
                     10
  Alexandre Cabanel
  Alfred Henry Maurer
                     4
  Alfred Sisley
```

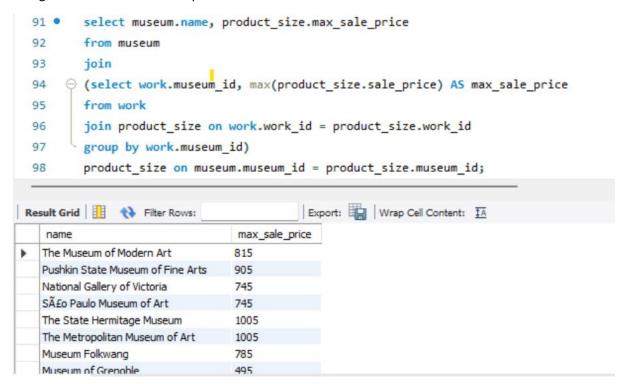
-- 7. Join, Where, and Order By:-- Retrieve the names of works and their corresponding artists' full names for works that have a sale price smaller than their regular price.



- -- 8. Join, Group By, and Average:
- -- Calculate the average height and width of the artworks in the database. Display the average height and width.



- -- Join, Group By, and Max:
- -- 9 Find the maximum sale price among all the works in each museum. Display the museum name along with the maximum sale price.



- -- Join, Group By, and Concatenate:
- -- 10. Concatenate the first name and last name of artists along with their nationality, separated by a comma.
- --- Display the concatenated string along with the count of works by each artist, ordered by the count in descending order.

