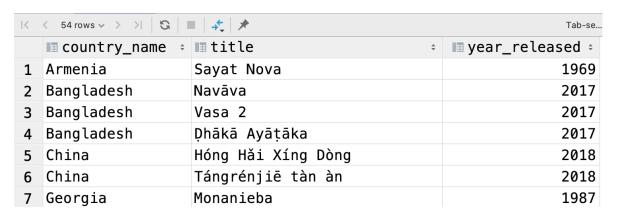
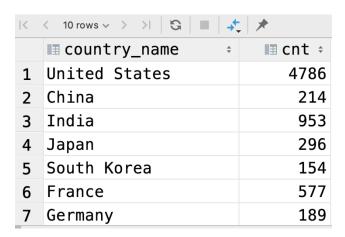
## Window Functions

## Regular Aggregate functions used as Window functions

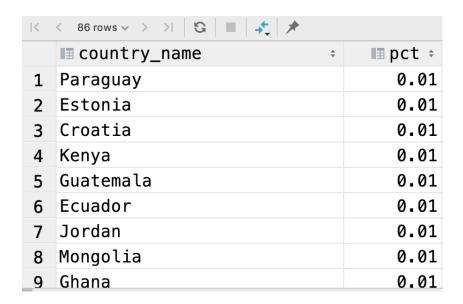
1. What is the most recent film (title and year) for every Asian country, ordered by country.



2. Countries in the database with more films than the average, with a common table expression and with a window function

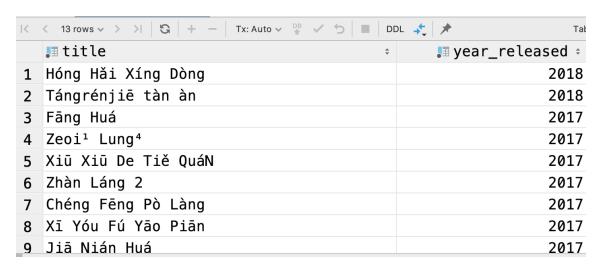


3. Which percentage of the films of the database does every country represent, ordered by increasing percentage? (use a Window function)



## Ranking

4. What are the title and year of the ten most recent films from China?



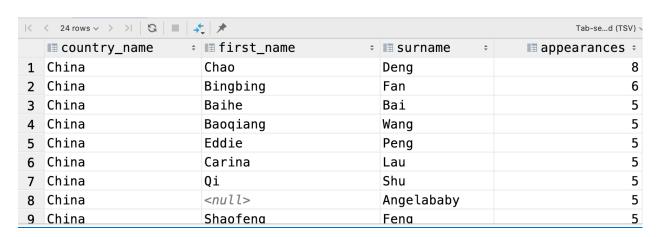
5. What is by continent the country with the most movies in the database.

|   | ■ continent ÷ | ■ country_name ÷ | ■ cnt ÷ |
|---|---------------|------------------|---------|
| 1 | AFRICA        | Nigeria          | 49      |
| 2 | AMERICA       | United States    | 4786    |
| 3 | ASIA          | India            | 953     |
| 4 | EUR0PE        | United Kingdom   | 788     |
| 5 | OCEANIA       | Australia        | 78      |

6. What are, by country, the top three actors that are found most often in films from China, the United States, France, Italy and India



7. Modify the preceding query to get for the same countries the top three actors that have appeared more than 3 times since 2010 (included)



## Other Window functions

8. For countries for which we have at least 20 films released in 2010 or later, display for each year the year, the name of the country, the number of films, and the percentage variation since the preceding year (use the lag() function)

| < 97 rows > >   S   ■   🗲   🖈 |                  |                                    |                |               |  |  |
|-------------------------------|------------------|------------------------------------|----------------|---------------|--|--|
|                               | ■ country_name ÷ | <pre>     year_released   * </pre> | ■ year_count ÷ | ■ variation   |  |  |
| 1                             | China            | 2010                               | 9              | <null></null> |  |  |
| 2                             | China            | 2011                               | 7              | -22.2%        |  |  |
| 3                             | China            | 2012                               | 7              | 0.0%          |  |  |
| 4                             | China            | 2013                               | 14             | 100.0%        |  |  |
| 5                             | China            | 2014                               | 19             | 35.7%         |  |  |
| 6                             | China            | 2015                               | 24             | 26.3%         |  |  |
| 7                             | China            | 2016                               | 14             | -41.7%        |  |  |
| 8                             | China            | 2017                               | 11             | -21.4%        |  |  |
| 9                             | China            | 2018                               | 2              | -81.8%        |  |  |