# **Assignment 1**

Oct. 29, 2021

#### Q 1.1



# Q 1.2

```
WITH cnt AS (

SELECT country,

COUNT(*) AS x,

AVG(COUNT(*)) OVER () AS avg

FROM movies

GROUP BY country

)

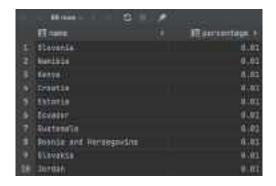
SELECT c.country_name

FROM cnt JOIN countries c ON cnt.country = c.country_code

WHERE cnt.x > cnt.avg;
```



# Q 1.3



## Q 2.1

```
WITH rk AS (

SELECT title, year_released, RANK() OVER (ORDER BY year_released DESC) AS r

FROM movies

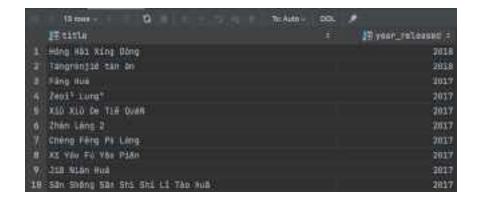
WHERE country = (SELECT country_code FROM countries WHERE country_name = 'China')

SELECT title, year_released

FROM rk

WHERE rk.r <= 10

ORDER BY year_released DESC;
```



## Q 2.2



#### Q 2.3

```
WITH cufii AS (
        SELECT *
        FROM movies
                 JOIN countries c ON movies.country = c.country_code
        WHERE country_name IN ('China', 'United States', 'France', 'Italy', 'India')
5
    ),
         cufii_actors AS (
             SELECT p.first_name
                                                 first_name,
                    p.surname
                                                 surname,
                    m.country_name
                                                 country,
                    RANK() OVER (PARTITION BY country_name
11
                        ORDER BY COUNT(*) DESC) rk
             FROM cufii m
```

```
JOIN credits cd ON cd.movieid = m.movieid

JOIN people p ON cd.peopleid = p.peopleid

WHERE cd.credited_as = 'A'

GROUP BY p.first_name, p.surname, m.country_name

SELECT country, first_name, surname

FROM cufii_actors

WHERE cufii_actors.rk <= 3

ORDER BY country, cufii_actors.rk;
```



### Q 2.4

```
WITH cufii2010 AS (
        SELECT *
        FROM movies
                 JOIN countries c ON movies.country = c.country_code
        WHERE country_name IN ('China', 'United States', 'France', 'Italy', 'India')
          AND year_released >= 2010
    ),
         cufii_actors_24 AS (
             SELECT p.first_name
                                                 first_name,
                    p.surname
                                                 surname,
10
                    m.country_name
                                                 country,
                    RANK() OVER (PARTITION BY country_name
                        ORDER BY COUNT(*) DESC) rk
             FROM cufii2010 m
14
                      JOIN credits cd ON cd.movieid = m.movieid
                      JOIN people p ON cd.peopleid = p.peopleid
             WHERE cd.credited_as = 'A'
             GROUP BY p.first_name, p.surname, m.country_name
             HAVING COUNT(*) > 3
    SELECT country, first_name, surname
    FROM cufii_actors_24 ca
    WHERE rk <= 3
23
    ORDER BY country, ca.rk;
```



## Q 3.1

```
WITH availble_cc AS (
        SELECT DISTINCT country,
                        year_released,
                        COUNT(*) OVER (PARTITION BY country,year_released) per_year,
                        COUNT(*) OVER (PARTITION BY country)
                                                                             flag
        FROM movies
6
        WHERE year_released >= 2010
    ),
         computable AS (
             SELECT country_name,
10
                    year_released,
                    per_year,
                    LAG(per_year, 1) OVER (PARTITION BY country_name ORDER BY year_released)
                        last_year
             FROM availble_cc m
                      JOIN countries c ON m.country = c.country_code
             WHERE flag >= 20
    SELECT country_name,
           year_released,
           per_year,
20
           ROUND(100 * (per_year::numeric - last_year) / last_year, 2) || '%' AS variation
    FROM computable c
    ORDER BY country_name, year_released;
```

