## Data Management and Artificial Intelligence Lab Class 7

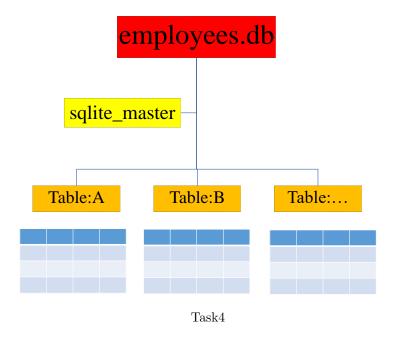
## Task 1 SQL queries (25 minutes)

In this task, you will continue to deal with the six airports-related CSV files. For each of the following queries, print the results and count the total number of results.

- 1. Which airport (name) has the longest runway in the dataset?
- 2. Which airports (names) have at least one runway with a concrete surface?
- 3. Select all lighted runways in Hebei Province

## Task 2 Employees database: Importing the data and exploring the tables (25 minutes)

Open the employees database file with SQLite. Explore the data to see how many tables (and their names) are in the file and how many attributes (and their names) are in each table. For this purpose, explore the sqlite3-built-in table called *sqlite\_master* as presented in the lecture. Afterwards, for each table in the database, print the number of rows it contains.



Task 3 Complex SQL queries (45 minutes)

For each of the following queries, simple print the first five rows of results (use the SQL clause LIMIT 5) and also count the total number of results.

- 1. Select all female employees who have been hired in 1995 or later, order them by their birth date ascendingly, and print their names.
- 2. Select all male employees who have been born in March 1957 and print their names.
- 3. Select all 'Senior Engineer' that were in the department 'Production' from 1995-01-01 to 1995-12-31 and show their employee number only.