



Database System Concepts for Non-Computer Scientist - WiSe 22/23

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<http://db.in.tum.de/teaching/ws2223/DBSandere/?lang=en>

Sheet 09

Exercise 1

Answer the following questions on our university database using SQL:

- a) Calculate how many lectures each student is attending. Students who do not attend any lecture should be included in the result as well (*attend_count* = 0) (use outer joins).
- b) Figure out how many students each professor knows: A professor knows students from one of their lectures or via a test they have supervised. Include professors not knowing any students and use outer joins. Hint: ¹

Exercise 2

Find those students who have attended all lectures that they wrote a test in.

Exercise 3

„Busy Students“: Find all students that have more weekly hours in total than the average student. Try to simplify the query using the with construct. (Also consider students that do not attend any lecture).

Exercise 4

Write SQL queries to answer the following questions (pizza.db.in.tum.de).

1. What is the name of the restaurant with the id 41884?
2. Which dish costs 23.4 €?
3. How many menus cost between 10 € und 20 €?
4. Which dish is the priciest?
5. How much does a Paulaner Spezi with 0,5 l costs at least, on average, at most? (Make sure you allow different menu names like 'Paulaner Spezi, 0,5' or 'Paulaner Spezi 0,5L')
6. How many different dishes are available per size (S, M, and L)?

Exercise 5

Write SQL queries to answer the following questions (pizza.db.in.tum.de).

1. Which restaurant offers the cheapest Pizza Margherita?
2. Which restaurant offers the best Pizza Margherita?

(Based on the average restaurant rating)

¹Remember that SQL has set operations.

3. At which restaurants should you rather not order when an Italian is present (because you can order Pizza Hawaii but not Pizza Regina)?
4. Which restaurants spelled 'Mozzarella' wrong?

Restaurant Schema

