

Exercise Sheet No. 6 - Database

**Energy Informatics**

Winter 2015

Submission deadline: 03.02.2016, at 11:15 a.m.

Using *power\_consumption* database, for each of the following exercises, submit the sql query <sup>1</sup> and the corresponding results. Make sure to deliver only the requested information!

**Exercise 1: Join variants (3 pts)**

Using one of the join variants, find unique city names where at least one of the city households doesn't have a reading. Don't use subquery.

**Exercise 2: Subqueries (2 pts)**

Use at least one subquery among other SQL techniques to find unique city names where at least one of the city households doesn't have a reading.

**Exercise 3: Set Operators (2 pts)**

Find the complementary city set to the set of cities you found in the previous query. Give a different textual description of this set of cities.

**Exercise 4: Aggregation and Grouping (3 pts)**

Employ aggregation functions and grouping among other SQL techniques to answer the following requests:

- For each city (city name), what is the average household's space
- For each city (city name), what is the average number of households per building

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<sup>1</sup>It should be only a single query that delivers the requested results!