



Tutorial: Aggregate and Nested Queries

This tutorial uses the schema and data of the database created in Tutorial 1. All queries will be discussed in class.

1. Aggregate Queries.

- (a) How many loans involve an owner and a borrower from the same department?
- (b) For each faculty, print the number of loans that involve an owner and a borrower from this faculty?
- (c) What are the average and the standard deviation of the duration of a loan? Round the results to the nearest integer.

2. Nested Queries

- (a) Print the titles of the different books that have never been borrowed. Use a nested query.
- (b) Print the name of the different students who own a copy of a book that they have never lent to anybody.
- (c) For each department, print the names of the students who lent the most.
- (d) Print the emails and the names of the different students who borrowed all the books authored by Adam Smith.

References

- [1] W3schools online web tutorials. www.w3schools.com. Visited on 21 July 2022.
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- [5] R. Ramakrishnan and J. Gehrke. *Database Management Systems*. McGraw-Hill, 2002.