DMIF, University of Udine

Data Management for Big Data SQL

Andrea Brunello andrea.brunello@uniud.it

May 2021



Introduction

SQL (Structured Query Language) is the de facto standard for interacting with relational databases. It allows one to:

- define and modify the database logical schema
- populate the database, modify and retrieve information
- perform administrative tasks, for instance, manage security and access rights
- customize concurrency control strategies



History

- IBM Sequel language developed as a part of System R project in the early 70s
- ANSI and ISO standard:
 - first formalization, SQL-86
 - latest standard, SQL:2019
- Commercial systems offer most, if not all, SQL-92 features, plus varying proprietary features
- In the remaining part of the lecture, we are going to refer to PostgreSQL



References

A. Silberschatz, H.F. Korth, S. Sudarshan *Database system concepts*, 7th Edition, 2020.