

Instructions

1. This is a theoretical assignment. It should be done individually.
2. You are free to consult research papers from the web, as long as you provide complete citations.
3. You must do the assignment independently, without discussing with other students.
4. Keep your solutions concise. Strike off any unnecessary details.
5. The Moodle submissions must be in the form of a single PDF document according to specified \LaTeX format.
6. A hard copy must be submitted as well, before the deadline.

Q1. Develop an algorithm to determine top-k tuples from a database based on values of an attribute. (max 2 pages)

Answer Goes Here

Q2. In the previous assignment, we saw that a relation can be arranged in a variety of ways: sort-, hash- & index-based. The tuples may also be arranged in a random order. Determine the best way to evaluate Union and Intersection of k relations keeping different possible combinations in mind. While deciding your strategy, remember that the relation sizes may also vary to a large extent. (max 3 pages)

Answer Goes Here

Q3. What functions are available on Date/Time in SQL and how are these implemented. (max 1 page)

Answer Goes Here

Q4. Discuss data types available in SQL, along with associated operations. What important datatypes are not implemented as a part of SQL. (max 1 page)

Answer Goes Here

Bibliography