

INFSCI 1022 – Database Systems – Spring2019

Final Exam Study Guide

Review:

1. Referential integrity
 - a. Primary keys
 - b. Foreign keys
2. Query clauses
3. Order of query clauses
4. Pay special attention to GROUP BY and the importance of grouping by ALL fields that are not generated by an aggregate function
5. WHERE clause vs. HAVING clause
6. IN predicate
7. Relationships (1:1, 1:m, m:n) and Cardinalities
8. IFNULL() vs. NULLIF()
9. IF statement
10. CASE / WHEN statement
11. Normal forms 1-3
12. Indexes
 - a. Difference between linear and binary search
 - b. Types of indexes supported in MySQL
13. Functions
 - a. Deterministic vs. non-deterministic
 - b. Remember that functions are read-only - they cannot update data
14. Delimiters (DELIMITER @@) - why do we need them?
15. Stored procedures
 - a. Advantages/disadvantages
 - b. Parameters - IN, OUT, INOUT
16. Difference between functions and stored procedures
17. Transactions
 - a. Autocommit
 - b. Rollback
18. NoSQL
19. ACID vs. BASE
20. Graph Databases