



## DAC – Database Technologies

1. What is normalization? What is its need? Explain 1NF , 2NF ,3NF and BCNF in detail.
2. Explain entity relationship diagram and Explain all types of relationships with examples?
3. Which are different types of joins in SQL? Give examples.
4. What is stored procedure? What are advantages of stored procedure?
5. How stored function is different than stored procedure?
6. What is difference between CHAR, VARCHAR and TEXT? Does data type matter while creating index?
7. Explain ACID properties of transaction. What is use of transaction?
8. What is table level locking and row level locking? What is optimistic locking and pessimistic locking?
9. Write a query to find third highest salary of employee (on EMP table) using sub-queries and without using sub-queries.
10. Write a query to print name of employee and his manager. Also print manager's manager.
11. What is use of views? How to limit DML operations on views to the given criteria?
12. What is normalization? Explain 1-NF, 2-NF, 3-NF and BCNF in detail.
13. What is NoSQL database? What are its advantages and limitations?
14. Explain BASE transactions and CAP theorem.
15. Explain types of NoSQL databases. Where they can be used?
16. Write queries to perform CRUD operations on mongo database.