

OOPs

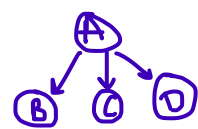
- ① Abstraction
- ② Encapsulation
- ③ Polymorphism

- ④ Modularity
- ⑤ Inheritance

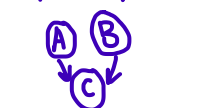
Deloitte Associate Analyst

Triggers	Stored Procedures
• call manually	• call manually
• only when event happens	• can call from client app. front end
• fired automatically	• can return values.

"Hierarchical"



"Multiple"



"Multi level"



1. What is Object Oriented Programming in C++? Explain various OOP concepts.
2. Difference between Encapsulation and Abstraction.
3. What are different types of polymorphism? *compile time, Runtime*
4. Difference between DDL and DML in DBMS. *→ Data Definition, Data Manipulation*
5. What is a view in DBMS? *→ doesn't exist*
6. Difference between candidate key and super key. *→ minimal super key*
7. Difference between GET and POST methods.
8. What are basic data structures available in Python? *list, tuple, dict, set*
9. Difference between multiple and multi-level inheritance.
10. What is the difference between SQL and MySQL? *→ software (DBMS)*
11. What is SMTP in Computer Network? *→ Simple mail Transfer protocol*
12. What are the similarities between array list and vector? *Java*
13. What is the difference between char and varchar in DBMS? *→ compile time*
14. What is the difference between function overloading and function overriding?
15. What are the different storage classes in C? *auto, extern, static, register* *→ runtime*
16. What are ACID properties in DBMS? *→ Atomicity, Consistency, Isolation, Durability*
17. What are access specifiers in C++? *→ public, private, protected*
18. What are the differences between stored procedures and triggers in SQL? *DBMS*
19. What do you know about Machine Learning?
20. What is the difference between DELETE and TRUNCATE in SQL?
21. Given a two-dimensional boolean array with each row sorted. There are m rows and n columns in the matrix. Find the row that has the most 1s in it. *sorted* *min index with value=1*
22. SQL queries for the following scenarios:
 - I. Query to return the name of employee having second highest salary.
 - II. Query to fetch details of employees whose Last name ends with an alphabet 'A' and contains five alphabets.
 - III. Query to fetch the department-wise count of employees sorted by department's count in ascending order.

Questions on project mentioned in resume:

- Motivation behind taking up a particular project.
- Which tools and technologies did you use in the project? Were all of these open source?
- Why did you use a particular tool or technology and not some other alternative?
- Questions on dataset - source, size, etc
- If it was a team project, what was your contribution and in how much time were you able to complete the project?
- Questions on result - accuracy, how well the project is working, limitations of the project.

ArrayList vs Vector

• asynchronous	• synchronized
• from JDK 1.2	• legacy class
• fast	• slow
Capacity → 50% ↑	Capacity 100% ↑

Http Methods

Get	Post
• request data from resource	• put/update data to server
• length restrictions	• no length restrictions
• cached	• never cached