

## Deloitte - Backend Developer

### Deloitte Interview Process

- Online Assessment Test
- Group Discussion/JAM Round
- Interview Round

### Interview Questions

1. Explain generational garbage collection in the context of Java.
2. What are the properties of Java Daemon Thread?
3. What is a heartbeat in Hadoop?
4. What is a volatile keyword?
5. Can we overload a constructor?
6. Is it possible to overload the main() method in Java?
7. How can you break a deadlock?
8. Differentiate between ArrayList and Vector.
9. Write an SQL query to obtain the second highest salary of an employee from the table named Employee.

Employee table

employee_name	Salary
A	25000
C	37000
D	50000
E	75800
F	22000

10. Differentiate between Ordinary least squares (OLS) and Maximum likelihood estimation (MLE).
11. Why do we need Dimensionality Reduction?
12. What is the difference between CSMA/CD and CSMA/CA in Computer Networks?
13. What is C Programming language?
14. What is the difference between C and java?
15. What is polymorphism in programming?
16. How can you create and use threads in Java?

17. What is the difference between char and varchar in DBMS?
18. What is an implicit cursor?
19. What is a proxy server?
20. What do you know about machine learning?
21. Can you explain function overloading?
22. What is the Python language?
23. Why is Python known as an interpreted language?
24. Name the various built-in data types of Python.
25. What is the role of the `_init_` method in Python?
26. What do you understand about unit tests in Python?
27. How do you create a class in Python?
28. How is a new modifier different from an override modifier?
29. How will you identify a missing value in a Pandas data frame?
30. How can you delete rows and columns from a data frame?
31. Define subquery and name its types.
32. What do you mean by view in SQL?
33. What is an implicit cursor?
34. What is the use of collation in SQL server?
35. What is the role of the recursive stored procedure?
36. Is SQL a programming language?
37. Compare a unique key with a primary key.
38. Distinguish MySQL and SQL.
39. How is the BETWEEN operator different from the IN operator in SQL?
40. Why do we use the DISTINCT keyword in SQL?
41. Briefly describe garbage collection in Java.
42. What do you mean by Java Daemon Thread?
43. What are the default values assigned to instance variables in Java?
44. Mention the different ways to create threads in Java.
45. What is a composition in Java, and list its uses?
46. Why doesn't Java use pointers?