

## HCL - Backend Developer

### Interview Process

- Written or Aptitude Assessment Round
- Group Discussion
- Technical Interview Round
- HR Round

### Interview Questions

1. What is the use of the finalize () method in Java?
2. What is the use of polymorphism in Java?
3. What is input-output (I/O) in C++?
4. What are the basic OOPS concepts?
5. Name a few languages that are based on OOPS concepts.
6. How can you achieve multiple inheritances in Java?
7. What are the different operating systems you have worked with? Which one do you like most and why?
8. Can a class be final?
9. Can a class be private?
10. What is the Collection framework?
11. Can you explain how HashMap works?
12. What is the difference between Application context and bean factory?
13. What is the difference between a constant variable and a global variable?
14. What do you mean by nested classes?
15. Name some software analysis & design tools.
16. What is the major difference between structured English and Pseudo Code?
17. What is the use of the pointer in C?
18. What are some of the differences between C & C++?
19. What are the 4 pillars of Object-oriented programming systems (OOPs)?
20. What are aggregate functions in SQL?
21. What are the constraints in SQL?
22. What do you mean by DBMS?
23. What is init in Python?
24. What is the role of the Domain Name System (DNS)?
25. What is the difference between C and Java?
26. What is the difference between compiler, interpreter, and assembler?
27. What is StringBuffer? How is it different from String?
28. What is the difference between a hashtable and a hashmap?
29. Write a small program to reverse a string.
30. Can you implement a linked list?
31. What are threads?

32. What is a pass-by reference? How is it different from a pass-by-pointer?
33. What is the difference between overloading and overriding?
34. What is a function pointer?
35. Can you explain about virtual functions?
36. If you have a class TestSample, how many constructors can you create?
37. What is the static keyword?
38. Explain the different types of data in C or explain the differences between basic and derived data types in C.
39. What are postfix and prefix operators?
40. What are SQL joins? Which is your favorite join?
41. Write a query to fetch only the first 3 records from the database.
42. What is the disadvantage of an indexed sequential file?
43. Is it possible to overload a procedure in a package?
44. What is cloud computing? How is it useful today?
45. Tell us about the different cloud computing service models.
46. Do you know about Big Data?
47. What is a foreign key?
48. What are access specifiers?
49. How can you initialize a global variable?
50. Can you write a program to find the sum of digits of a number?
51. Given a linked list, remove the nth node from the end of the list and return its head.
52. Determine whether an integer is a palindrome. Do this without extra space.
53. What is the use of the pointer in C?
54. What is input-output (I/O) in C++?
55. Explain about virtual functions
56. Can we have a Private Constructor in Java?
57. How is a constant variable different from a global variable?
58. What are access specifiers?
59. How do you achieve multiple inheritances in Java?
60. What is the difference between compiler, interpreter, and assembler?
61. Difference Between Primary Key and Unique Key
62. What are the constraints in SQL?
65. Write an SQL query to remove the duplicate record from a table.
67. Explain CLS
68. Explain role-based security in .NET
69. What is a delegate in .NET?
70. Do you know about BigData?
71. What are 8v's of BigData?
72. Can you explain how HashMap works?
73. What do you mean by the Process States in Linux?
74. What is BASH?
75. What is the difference between UNIX and LINUX?
76. How do you share a program across different virtual desktops under Linux?
77. What are threads?