

## Tiger Analytics - Backend Developer

### Interview Process

- Online Application
- Screening
- Technical Assessment
- Technical Interview
- Culture Fit Interview

### Interview Questions

1. What is the difference between a primitive data type and an object?
2. What are the eight primitive data types in Java?
3. How would you define a superclass?
4. How do you convert a string to an integer in Java?
5. What is a constructor in Java?
6. How do you handle exceptions in Java?
7. What is a package in Java?
8. What is the difference between the equals() method and the == operator in Java?
9. What is the difference between a stack and a queue data structure, and when would you use each one?
10. What is the purpose of version control, and what are some popular version control systems?
11. How do you handle missing or corrupted data in a dataset during the data cleaning process?
12. Can you explain the concept of recursion in programming, and provide an example of a recursive function?
13. How do you handle memory leaks in a software application?
14. What is the difference between a synchronous and an asynchronous function in JavaScript?
15. How do you approach debugging a complex software problem, and what tools do you use to aid in the process?
16. Write a program to implement topoSort in the graph.
17. Write the program to reverse the string in Java.
18. Can you have multiple init methods in a single Python class? If so, how do they work?
19. What are B-trees Data structures?
20. How do you represent a graph in computer memory, and how does it affect the performance of the Topological Sorting algorithm?
21. What is the difference between a HashMap and a TreeMap in Java?
22. What is the purpose of the 'self' keyword in Python class methods? Why is it important?
23. What is the difference between a shallow copy and a deep copy in Python? How do you create each one?
24. What is the difference between 'is' and '==' in Python? When should you use each one?

25. What is the difference between a module and a package in Python? How do you import them?
26. What is oops?
27. What are the main features of oops?
28. What is a superclass?
29. Why is Java a platform-independent language?
30. What do you mean by local and instance variables?
31. What is the space and time complexity of this function?
32. What do you mean by asymptotic analysis of an algorithm?
33. What are modules and packages in Python?
34. What is `__init__`?
35. What is the algorithm for the in-order traversal of a binary tree?
36. What is Priority Queue? Write some its applications.
37. What are pickling and unpickling?
38. What are pure virtual Functions?
39. What do you understand by garbage collection in oops world?
40. What is the time complexity of this function?
41. What are B-trees Data structures?
42. Explain how the file is removed from Python.
43. Explain this Statement "A single try block and multiple catch blocks can co-exist in a Java Program"?
44. Write the syntax of writing the ternary Operators in Python.
45. What are lambda functions in Python?
46. What is an AVL TREE?
47. Write the program to reverse the string in Java.
48. Write a program to check whether two strings are anagrams.
49. Write a program to implement topoSort in the graph.
50. Write a Python program for the triangle.