#### Alternate Java Questions

### **Topic: arrays**

- How can you find the missing number in a sequence using arrays?
- What is the best way to rotate an array by k elements?

# Topic: linked\_lists

- How do you reverse a singly linked list iteratively?
- Explain the process of removing duplicates from a sorted linked list.

### Topic: hash\_maps

- How do you implement a frequency counter using HashMap in Java?
- What happens when you override hashCode and not equals in Java?

# **Topic:** binary\_search

- How do you find the first occurrence of a number using binary search?
- Can binary search be applied to rotated sorted arrays?

# **Topic:** dynamic\_programming

- Explain the 0/1 Knapsack problem using dynamic programming.
- What is the longest common subsequence and how is it solved using DP?

# Topic: file\_handling

- How can you count the number of words in a file using Java?
- What are the differences between FileReader and BufferedReader?