### Sample Java Questions

### **Topic: arrays**

- How do you reverse an array in Java?
- What is the time complexity of merging two sorted arrays?

### Topic: linked\_lists

- What is the advantage of using a linked list over an array?
- How do you detect a cycle in a linked list?

# Topic: hash\_maps

- How does a HashMap handle collisions in Java?
- What is the difference between HashMap and Hashtable?

## **Topic:** binary\_search

- How does binary search algorithm work?
- When should binary search be preferred over linear search?

### **Topic:** dynamic\_programming

- What is memoization in dynamic programming?
- How is tabulation different from memoization?

### Topic: file\_handling

- How do you read a file line by line in Java?
- What are the different types of file streams in Java?