## List

- 1. How do you create an empty list?
- 2. How do you add an element to a list using indexing?
- 3. How do you access the first element of a list?
- 4. How can you replace an element at a specific index in a list?
- 5. How can you access the last element of a list without knowing its length?
- 6. How do you access a slice of a list (e.g., the first three elements)?
- 7. How can you concatenate two lists?
- 8. How can you check if an element is in a list?
- 9. How can you count the number of elements in a list?
- 10. How do you reverse a list using indexing?
- 11. How can you remove an element from a list by index?
- 12. How do you find the index of a particular element in a list?
- 13. How do you check if a list is empty?
- 14. How can you access every second element in a list?
- 15. How can you access a list in reverse order without modifying it?
- 16. How would you remove all occurrences of a specific element from a list?
- 17. Given two lists, how would you find the common elements between them?
- 18. How would you create a new list that contains only the unique elements from an existing list?
- 19. How would you flatten a list of lists into a single list (without using any built-in functions)?
- 20. How would you split a list into two parts at a given index?
- 21. How would you rotate a list by n positions to the left?
- 22. How would you check if a list is a palindrome?
- 23. How would you sort a list without using any built-in sort functions (e.g., using a sorting algorithm like bubble sort)?
- 24. How would you find the second largest element in a list without using built-in sorting functions?
- 25. How would you find pairs of elements in a list that sum up to a specific number?
- 26. How would you remove duplicates from a list while preserving the original order?
- 27. How would you merge two sorted lists into a single sorted list?
- 28. How would you check if one list is a subset of another list?
- 29. How would you find the longest consecutive sequence in a list of numbers?
- 30. How would you find the majority element in a list (the element that appears more than half the time)?