40 Questions on List & Set Inbuilt Functions (Python)

PART A: List Inbuilt Function Questions

1. What is the use of the append() function in a list?

2. How is append() different from extend()?

3. What is the purpose of the insert() function?

4. How does the remove() function work in a list?

5. What happens if the element to be removed using remove() is not present?

6. Explain the pop() function with index and without index.

7. What is the difference between clear() and assigning an empty list?

8. How does the index() function work?

9. What happens if index() does not find the element?

10. Explain the use of the count() function.

11. What is the purpose of the sort() function?

12. How can you sort a list in descending order using sort()?

13. Explain the reverse() function.

14. What is the difference between shallow copy and deep copy of a list?

15. How do you find the maximum and minimum elements in a list?

16. How do you calculate the sum of list elements using inbuilt functions?

17. What happens when len() is applied to an empty list?

18. What is the difference between list slicing and list indexing?

19. How does list concatenation work using the + operator?

PART B: Set Inbuilt Function Questions

20. What is a set in Python?

21. How is a set different from a list?

22. What is the use of the add() function in a set?

23. How does the update() function work in a set?

24. What is the difference between add() and update()?

25. Explain the remove() function in a set.

26. What is the difference between remove() and discard()?

27. What happens when pop() is used on a set?

28. Explain the clear() function in sets.

29. What is the purpose of the union() function?

30. How does the intersection() function work?

31. Explain the difference() function with an example.

32. What does the symmetric_difference() function do?

33. How does the intersection_update() function work?

34. Explain the difference_update() function.

35. What is the use of the symmetric_difference_update() function?

36. What happens when duplicate elements are added to a set?

37. Can a set contain mutable elements? Explain.

38. How do you convert a list into a set and why is it useful?

39. How does len() behave when applied to a set?

40. What is the difference between frozenset and set?