

Questions on Slicing and List Function

1. Given a list `numbers = [2, 4, 6, 8, 10]`, extract the sub-list `[4, 6]`.
2. Create an empty list called `shopping_list`. Add items like "milk", "eggs", and "bread".
3. Given a list `languages = ["Python", "Java", "C++"]`, add "JavaScript" at index 1.
4. Extend the list `[1, 2, 3]` with the elements `[4, 5, 6]`.
5. Remove the element "banana" from the list `fruits = ["apple", "banana", "cherry"]`.
6. Given a list `names = ["Alice", "Bob", "Charlie"]`, remove and print the last element.
7. Count how many times the number 5 appears in the list `numbers = [2, 5, 8, 5, 3, 5]`.
8. Sort the list of integers `numbers = [5, 2, 8, 1, 3]` in ascending order.

9. Reverse the list of integers `numbers = [5, 2, 8, 1, 3]`.

10. Create a list of strings `fruits = ["apple", "banana", "cherry", "date"]`. Get the last two elements.

11. Add the list `[8, 9, 10]` to the list `[1, 2, 3, 4, 5]` to get a combined list.

12. Add the number 7 at the beginning of the list `[1, 2, 3, 4]`.

13. Given a list `numbers = [5, 10, 15, 20]`, remove the number 15.

14. Given a list `a = [1, 2, 3]` and a list `b = [4, 5]`, combine both lists.

15. Remove the element at index 1 from the list `colors = ["red", "green", "blue"]`.

16. Given a list `colors = ["red", "green", "red", "blue", "red"]`, count the occurrences of the string "red".

17. Given a list of strings `names = ["John", "Alice", "Bob", "Eve"]`, sort it alphabetically.

18. Given a list of strings `names = ["John", "Alice", "Bob", "Eve"]``, reverse the order of elements.
19. Using slicing, reverse the order of elements in the list `letters = ['a', 'b', 'c', 'd', 'e']``.
20. Starting with a list of integers `values = [1, 2, 3]``, add the integer 4 three times at last.
21. Create a list of colors `colors = ["red", "green", "blue"]``. Add "yellow" between "red" and "green".
22. Given a list `fruits = ["apple", "banana"]`` add the items of list `fruits2 = ["cherry", "date"]`` to fruits list.
23. Remove the first occurrence of the string "apple" from the list `items = ["apple", "banana", "apple"]``.
24. Remove and return the last element from the list `stack = [10, 20, 30, 40, 50]``.
25. Reverse the list of lists `matrix = [[1, 2, 3], [4, 5, 6], [7, 8, 9]]``.
26. Given a list `data = [1, 2, 3, 4, 5, 6, 7]``, extract the sub-list `[2, 4, 6]``.

27. Add the string "apple" to a list `fruits = ["banana", "cherry"]``.
28. Add the string "world" at index 2 in the list `greetings = ["hello", "there"]``.
29. Create a list `even = [2, 4, 6]`` and add `[8, 10, 12]`` to it.
30. Remove the element at index 2 from the list `data = [1, 2, 3, 4, 5]``.
31. Given a list `numbers = [5, 10, 15, 20]``, remove and print the second element.
32. Count the number of 'a' in the list `letters = ['a', 'b', 'e', 'i', 'a', 'o', 'u', 'a']``.
33. Extract every third element from the list `numbers = [10, 20, 30, 40, 50, 60, 70]``.
34. Create a list called `numbers`` with the elements `[1, 2, 3]``. Add a string "hello" to it.
35. Given a list `values = [10, 30, 40]``, add the number 20 to a suitable index to complete the sequence.
36. Extend the list `letters = ['a', 'b']`` with the list `['c', 'd', 'e']``.

37. Remove the last element from the list ``values = [2, 4, 6, 8, 10]``.

38. Remove the element at index -1 from the list ``values = [1, 2, 3, 4, 5]``.

39. Count the occurrences of the element "apple" in the list ``fruits = ["apple", "banana", "apple"]``.

40. Sort the list ``values = [10, 5, 15, 20]`` in descending order.

41. Reverse the list ``values = [10, 5, 15, 20]`` using list slicing.

42. Extract multiple of 4 in reverse order from a list `num=[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16]`.