

1. Write a Python script to implement an in-place shuffle of a list.
2. How would you extract alternating elements from a list to create two new lists?
3. Implement a Python script to check if a list is a subsequence of another list.
4. Create a Python script to perform a zig-zag merge of two lists into a single list.
5. Write a Python script that returns all unique combinations of elements from a list that sum to a specific value.
6. Given a tuple, write a Python script to add an element at a specific index.
7. Implement a script that returns a new tuple containing elements from a given tuple after modifying every nth element.
8. Write a Python script to reverse the contents of a tuple without converting the tuple into a list.
9. Create a script to find the longest consecutive sequence of integers in a tuple.
10. Write a Python script to create a tuple of the first and last elements of every other tuple in a list of tuples.
11. Write a Python script to extract keys from a dictionary based on a subset of values.
12. Implement a script that takes a dictionary and returns a new dictionary with keys and values inverted, where values are lists of keys from the original dictionary.
13. Create a Python script to filter a dictionary by removing entries that do not satisfy a predicate function.
14. Implement a dictionary comprehension that partitions dictionary values into groups based on their modulus with a given number.
15. Write a Python script to recursively merge nested dictionaries.
16. Implement a script to find elements that are in either of two sets but not in their intersection.
17. Write a Python script that determines if a given set is a proper subset of another set without using the subset method.
18. Create a script to generate all possible pairs (as tuples) from two sets, excluding pairs with duplicate items.
19. Implement a Python script to simulate the set difference operation using list comprehensions.
20. Write a script to find the minimum set of subsets from a given set such that each subset has an element-wise property (like being divisible by a specific number).
21. Write a Python script to interleave multiple lists of different lengths.
22. Implement a method to convert a list of strings into a dictionary where the keys are strings and values are their corresponding lengths.

23. Create a script that returns the nth Fibonacci number, where n is provided by the user, using a list to store intermediate results.
24. Develop a Python script to find all pairs in a list whose sum is equal to a given number without using extra space.
25. Write a script to cyclically rotate a list left by k elements.
26. Write a Python script to calculate the sum of tuple elements, where tuples are nested within a larger tuple.
27. Implement a method to convert a flat list into a tuple of tuples, where each tuple contains consecutive n elements from the list.
28. Create a Python script that finds the tuple with the highest sum of elements in a list of tuples.
29. Develop a script to determine if two tuples contain any common elements efficiently.
30. Write a script that replaces every element in a tuple with the cumulative sum up to that element.
31. Write a Python script to count the frequency of each value in a dictionary where the values are lists.
32. Implement a method to create a dictionary from two lists without using the zip function.
33. Create a Python script to find keys with the highest value in a dictionary.
34. Develop a script that combines several dictionaries into one by summing the values of common keys.
35. Write a Python script to sort a dictionary by the length of its values.
36. Implement a script to find the union of three or more sets without using union method.
37. Write a Python script that checks if a set is disjoint from multiple other sets.
38. Create a script that returns the symmetric difference between a list of sets.
39. Develop a method to remove a random element from a set without using the pop method.
40. Write a script to find all subsets of a set that meet a certain condition (e.g., subsets whose elements sum to a prime number).