

Tuples

1. How do you create an empty tuple?
2. How do you create a tuple with a single element?
3. How do you access elements in a tuple?
4. How do you check the length of a tuple?
5. How do you check if an element exists in a tuple?
6. How can you concatenate two tuples?
7. How do you convert a list into a tuple?
8. How do you access a slice of a tuple (e.g., the first three elements)?
9. How do you unpack values from a tuple into variables?
10. How do you reverse a tuple?
11. How do you iterate over a tuple?
12. How do you convert a tuple into a string?
13. How do you find the index of an element in a tuple?
14. How can you count occurrences of a specific element in a tuple?
15. How can you use tuples as dictionary keys?
16. How do you sort a list of tuples based on the second element in each tuple?
17. How do you merge multiple tuples into one?
18. How do you nest tuples within another tuple, and how do you access nested elements?
19. How would you swap values in two variables using a tuple?
20. How do you check if a tuple contains other tuples as elements?
21. How do you find the length of the longest tuple in a list of tuples?
22. How do you perform element-wise addition of two tuples of the same length?
23. How do you handle a tuple of unknown size when unpacking into variables?
24. How would you implement a tuple as an immutable list and handle operations like appending?
25. How can you use a generator to create a tuple?