

Intermediate Practice Questions: Python For Loops and Lists

Questions

1. Write a program that prints the sum of all elements in a list. **Example Input:** [1, 2, 3, 4] **Expected Output:** 10
2. Write a program that finds the largest number in a list. **Example Input:** [5, 3, 9, 2] **Expected Output:** 9
3. Write a program that creates a new list containing only the even numbers from an input list. **Example Input:** [1, 2, 3, 4, 5, 6] **Expected Output:** [2, 4, 6]
4. Write a program that calculates the average of all numbers in a list. **Example Input:** [10, 20, 30, 40] **Expected Output:** 25.0
5. Write a program that reverses a list without using built-in functions. **Example Input:** [1, 2, 3, 4] **Expected Output:** [4, 3, 2, 1]
6. Write a program that removes duplicates from a list using a `for` loop. **Example Input:** [1, 2, 2, 3, 4, 4] **Expected Output:** [1, 2, 3, 4]
7. Write a program that counts the number of occurrences of each element in a list. **Example Input:** [1, 2, 2, 3, 3, 3] **Expected Output:** 1: 1 occurrence, 2: 2 occurrences, 3: 3 occurrences
8. Write a program that prints the indices of all occurrences of a specific value in a list. **Example Input:** List = [1, 2, 3, 2, 4, 2], Value = 2 **Expected Output:** Indices: 1, 3, 5
9. Write a program that creates a new list containing the squares of each number in an input list. **Example Input:** [1, 2, 3, 4] **Expected Output:** [1, 4, 9, 16]
10. Write a program that filters out all elements from a list that are less than 10. **Example Input:** [5, 15, 8, 20, 3] **Expected Output:** [15, 20]