

# Python List Coding Questions for Freshers

## Q1. Find the Sum of All Elements in a List

Description: Given a list of numbers, calculate the total sum of all elements.

Input: [1, 2, 3, 4]

Expected Output: 10

## Q2. Find the Largest Number in a List

Description: Find and return the maximum number from the list.

Input: [10, 22, 5, 75]

Expected Output: 75

## Q3. Check if a List Contains a Given Element

Description: Check if a specific number exists in the list.

Input: List = [1, 2, 3], Element = 2

Expected Output: True

## Q4. Count the Number of Even Numbers in a List

Description: Count how many even numbers are present in the list.

Input: [1, 2, 4, 5, 6]

Expected Output: 3

## Q5. Print Elements at Even Index Positions

Description: Return the elements that are located at even indexes (0, 2, 4, ...).

Input: ['a', 'b', 'c', 'd', 'e']

Expected Output: ['a', 'c', 'e']

## Q6. Find the Length of a List Without Using len()

Description: Manually count how many elements are in the list without using the len() function.

Input: [1, 2, 3, 4]

Expected Output: 4

## Q7. Remove All Odd Numbers from a List

Description: Return a new list with only even numbers from the original list.

Input: [1, 2, 3, 4, 5]

Expected Output: [2, 4]

#### **Q8. Find the First Duplicate Element in a List**

Description: Find and return the first number that appears more than once in the list.

Input: [1, 2, 3, 2, 4]

Expected Output: 2

#### **Q9. Sort a List in Ascending Order Without Using sort()**

Description: Sort a list of numbers from smallest to largest manually (e.g., using loops).

Input: [5, 3, 8, 2]

Expected Output: [2, 3, 5, 8]

#### **Q10. Create a List of Squares of Numbers from 1 to N**

Description: Given a number N, return a list of squares from  $1^2$  to  $N^2$ .

Input: N = 5

Expected Output: [1, 4, 9, 16, 25]