

Silicon Institute of Technology
Computer Programming Lab
Lab Assignment - 4
(Python Programs using List)

August 21, 2025

1. Write a Python program to create a list of 5 fruits. Print the first fruit, the last fruit, and the fruit at index 2.
2. Write a Python program that stores numbers 1 to 10 in a list. Print the first 3 numbers, the last 3 numbers, and every alternate number.
3. Write a Python program to create an empty list. Add numbers 1, 2, and 3 using `append()`. Then extend the list with `[4, 5, 6]`. Print the final list.
4. Write a Python program with a list of numbers `[10, 20, 30, 40, 50]`.
Remove the number 30 using `remove()`.
Remove the last element using `pop()`.
Print the updated list after each step.
5. Write a Python program to check if a given number is present in the list of numbers. If present, print "Found", otherwise "Not Found"
6. Write a Python program to calculate the sum, average of numbers and also find the maximum and minimum numbers stored in the list.
7. Write a Python program that counts how many times a given number appears in the list.
8. Write a Python program to remove duplicates from the list `[1, 2, 2, 3, 4, 4, 5]` and print the unique values.
9. Write a Python program to reverse a list using list slicing.
10. Concatenate two lists index-wise.
`list1 = ["M", "na", "i", "Ku"]`
`list2 = ["y", "me", "s", "nal"]`
Expected output: `['My', 'name', 'is', 'Kunal']`
11. Write a Python program using list comprehension to create a list of even numbers between 1 and 20.

12. Write a Python program to find the second largest number in a list of numbers.
13. Write a Python program to check if the list [1, 2, 3, 2, 1] is a palindrome (same forwards and backwards).
14. Given a two Python list. Iterate both lists simultaneously such that list1 should display item in original order and list2 in reverse order
list1 = [20, 35, 45, 78]
list2 = [100, 200, 300, 400]
Expected output:
20 400
35 300
45 200
78 100
15. Add item 7000 after 6000 in the following Python List
list1 = [10, 20, [300, 400, [5000, 6000], 500], 30, 40]
Expected output:[10, 20, [300, 400, [5000, 6000, 7000], 500], 30, 40]
16. Given a Python list, find value 20 in the list, and if it is present, replace it with 200. Only update the first occurrence of a value
list1 = [5, 10, 15, 20, 25, 50, 20]
Expected output:
list1 = [5, 10, 15, 200, 25, 50, 20]
17. Write a Python program to split a sentence "Python is fun" into a list of words, and then join them back into a single string separated by -.
18. Given a list of strings, display each string reversed.
List = ["cat", "dog", "bird"]
Expected output: ['tac', 'god', 'drib']
19. Given a nested list, flatten it into a single list.
Input: [[1, 2], [3, 4], [5, 6]]
Expected Output: [1, 2, 3, 4, 5, 6]
20. Given a list, find the index where the sum of the left part equals the sum of the right part.
Input: [1, 7, 3, 6, 5, 6]
Expected Output: 3 (because [1+7+3] = [5+6])