

Advance Python Programming & Applications

Lists with Functions

13-March-2024 (Wednesday)

1. Create a function that takes a list of numbers as input and returns the sum of all the numbers.
2. Write a function that takes two lists as input and returns a new list containing elements that are common to both input lists.
3. Implement a function that takes a list of strings as input and returns the longest string in the list.
4. Create a function that takes a list of integers as input and returns a new list with only the even numbers from the input list.
5. Write a function that takes a list of strings as input and returns a new list with the strings sorted alphabetically.
6. Implement a function that takes a list of numbers as input and returns the average of all the numbers in the list.
7. Create a function that takes a list of numbers as input and returns a new list with the square of each number in the input list.

8. Write a function that takes a list of strings as input and returns a new list with the length of each string in the input list.
9. Implement a function that takes a list of integers as input and returns the largest number in the list.
10. Create a function that takes two lists of equal length as input and returns a new list where each element is the sum of the corresponding elements from the input lists.

These tasks are designed to reinforce the understanding of both functions and lists in Python and provide opportunities to practice working with list manipulation within function contexts.