

Day-6 (Assignment)

1. Write a Python function that takes a list and returns a new list with unique elements of the first list.

Sample List: [1,2,3,3,3,3,4,5]

Unique List: [1, 2, 3, 4, 5]

2. Write a Python program that takes any two lists M and N of the same size and add their elements together to form a new list M and N whose elements are sums of the corresponding elements in L and M.

For instance, if L = [3, 1, 4] and M = [1, 5, 9], then N should equal [4,6,13].

3. Write a Python function to sum all the numbers in a list.

Sample List: (8, 2, 3, 0, 7)

Expected Output: 20

4. Write a Python program that creates a list of 10 random integers. Then create two lists- Odd list and Even List that has all odd and even values in the list respectively.
5. Write a program using map () function to create a list of squares of numbers in the range 1-10.
6. Write a Python program to generate number of terms in the Fibonacci sequence and store it in the list. Then find the sum of the even-valued terms.
7. Write a Python function to multiply all the numbers in a list.

Sample List: [8, 2, 3, -1, 7]

Expected Output: -336

8. Write a Python program to take an input list and removes the element at index 4 and add it to the 2nd position and also, at the end of the list.
9. Write a program to compare two equal-sized lists and print the first index where they differ.
10. Create the following lists using a for loop:

The list ['a','bb','ccc','dddd', . . .] that ends with 26 copies of the letter z.

11. Write a Python program that has a list of both positive and negative numbers. Create another list using filter () that has only positive values.