

# **R3WEB SKILLUP SUMMER** 2023 Task - 003

Date: 07/08/2023

1. Write a Python program to find the sum of all elements in a given list.
2. Create a program that takes a list of numbers as input and outputs a new list with only the even numbers.
3. Write a program to reverse a given list without using the reverse() function.
4. Implement a program to find the largest element in a list of integers.
5. Create a program that removes all duplicates from a list and returns a new list with unique elements.
6. Create a program that takes a list of numbers and returns a new list with cumulative sums.
7. Implement a program to find the intersection of two lists, keeping duplicates.
8. Write a Python program to rotate a list by a given number of positions to the right.
9. Create a program that takes a list of tuples (name, age) and sorts them based on age.
10. Implement a program to find the maximum difference between two elements in a list where the larger element comes after the smaller element.
11. Write a program that takes a list of strings and returns a new list with only the strings containing a specific substring.
12. Create a program for Decimal to binary number conversion and vice versa?
13. Write a Program to Find the Magic No?
14. Question: Write a Python program that takes a list of integers as input and finds the longest subsequence of consecutive integers. A subsequence is a sequence that can be derived from another sequence by deleting some or no elements, without changing the order of the remaining elements.

For example, given the input list: [1, 9, 3, 10, 4, 20, 2], the program should output [1, 3, 4] since this is the longest subsequence of consecutive integers present in the list.

### **Instruction for Solution Submission:**

1. Copy all the files into a folder
2. Right click and send it to create zip (compress zip folder).
3. Rename it to "Yourname\_taskno\_date"
4. Upload it to Discord Server

Quote of the Day:

*Code your **dreams** into reality, **one** line at a **time**.*