



# Design- Week5

## Week 5

### ▼ CP Question-

#### *Question- Add two numbers represented as Linked Lists*

Given the heads of two non-empty linked lists representing two non-negative integers. The digits are stored in reverse order, and each of their nodes contains a single digit. Add the two numbers and return the sum as a linked list.

#### **Examples:**

Input Format:

(Pointer/Access to the head of the two linked lists)

num1 = 243, num2 = 564

l1 = [2,4,3]

l2 = [5,6,4]

Result: sum = 807; L = [7,0,8]

Explanation: Since the digits are stored in reverse order, reverse the numbers first to get the original number and then add them as  $\rightarrow 342 + 465 = 807$ .

▼ Coding Challenge-

- Implement a basic text editor with features to open, edit, and save text files.
- Design a basic password manager that stores, retrieves, and generates secure passwords.
- Create a system that predicts equipment failures using sensor data and machine learning algorithms.