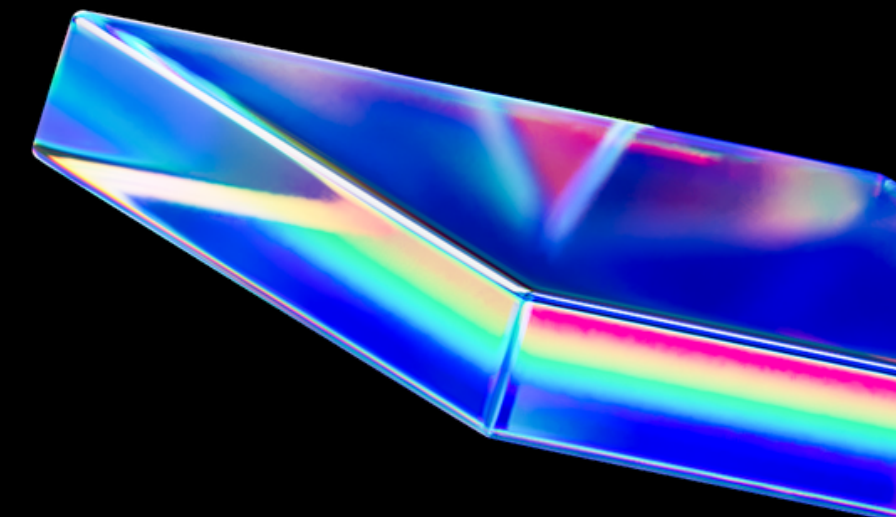ENSKILL

CODE MANIAC

ENSKILL CLUB

Saturday (08-04-2023)
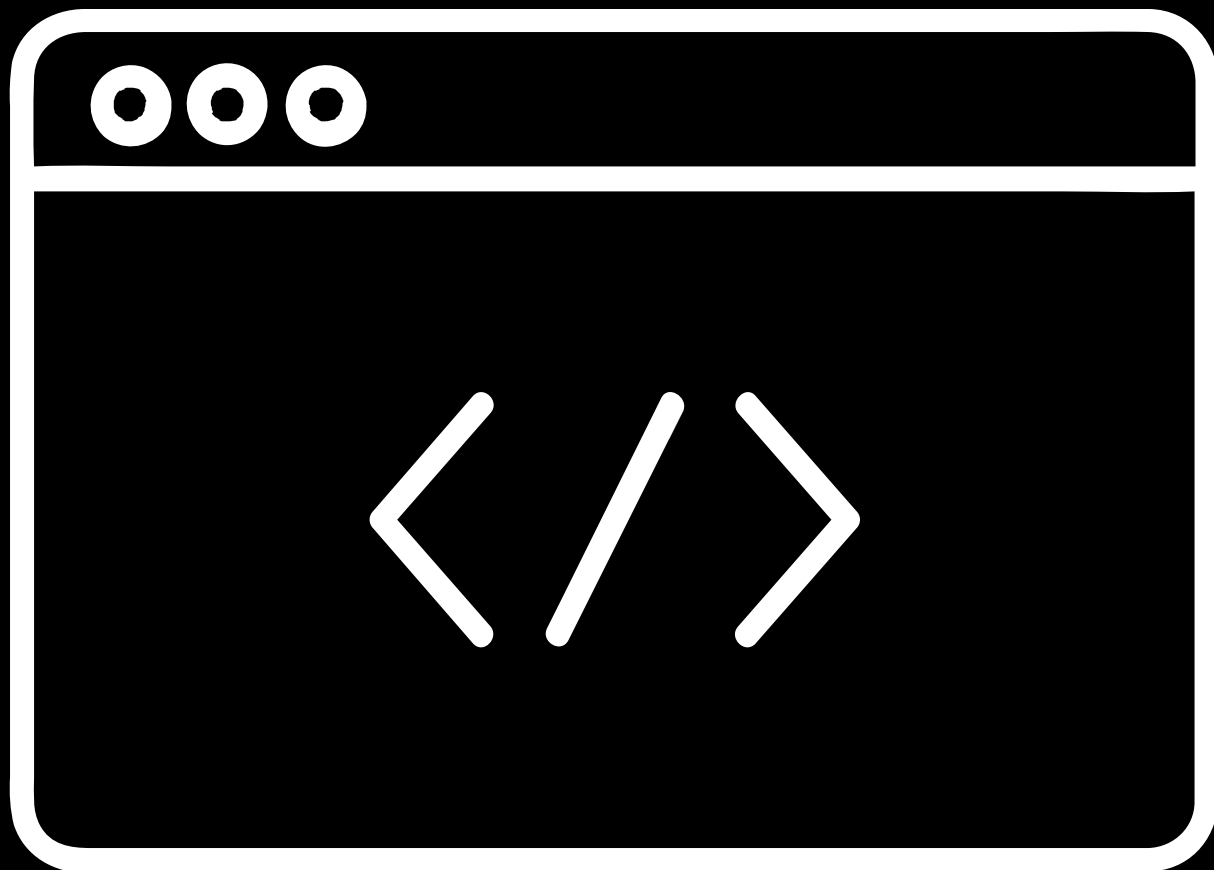Timings - 9:30am - 11:30am

Envision Engage Enforce

Rules

Who said there is one, no rules just learn | enjoy | code .
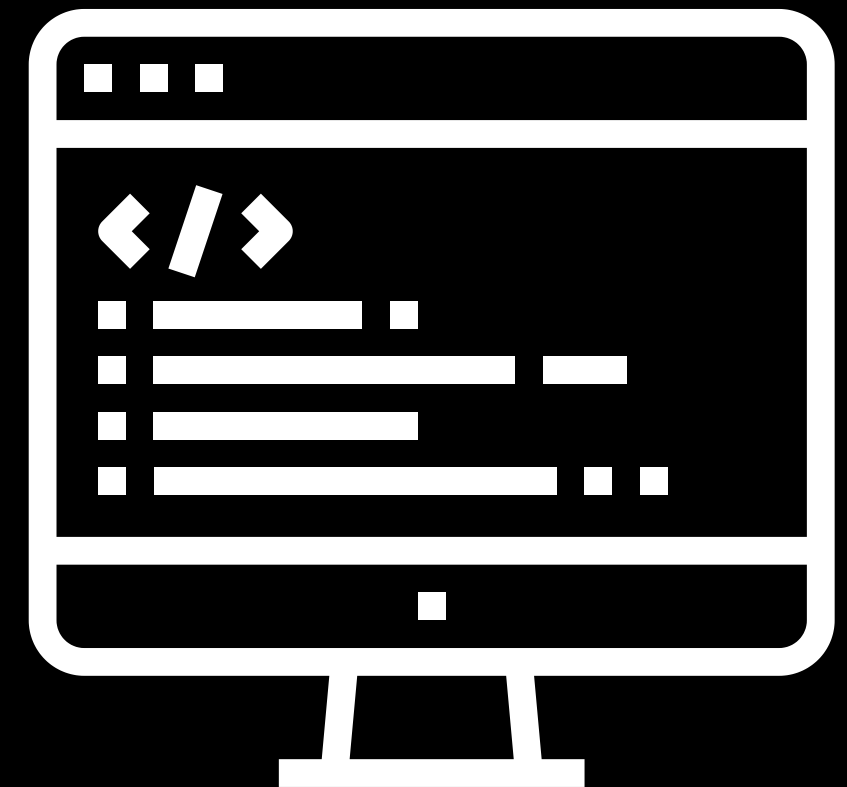
Code in any programming language .

Questions

There are Three leves of problems :

- Easy
- Medium
- Hard

Q1. Write a progam to find Number of Closed Islands   HARD

Given a 2D grid consists of 0s (land) and 1s (water). An island is a
maximal 4-directionally connected group of 0's and a closed island
is an island totally (all left, top, right, bottom) surrounded by 1's.
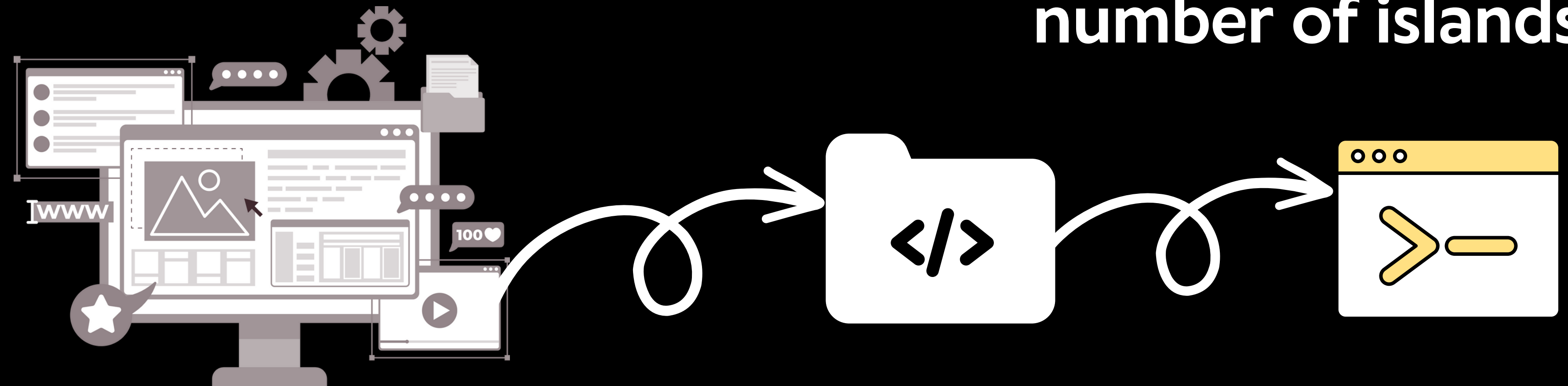
Return the number of closed islands.

Inputs :

1. [[0,0,1,0,0],[0,1,0,1,0],[0,1,1,1,0]]
2. [[1,1,1,1,1,1,1,0],[1,0,0,0,0,1,1,0],[1,0,1,0,1,1,1,0],
   [1,0,0,0,0,1,0,1],[1,1,1,1,1,1,1,0]]
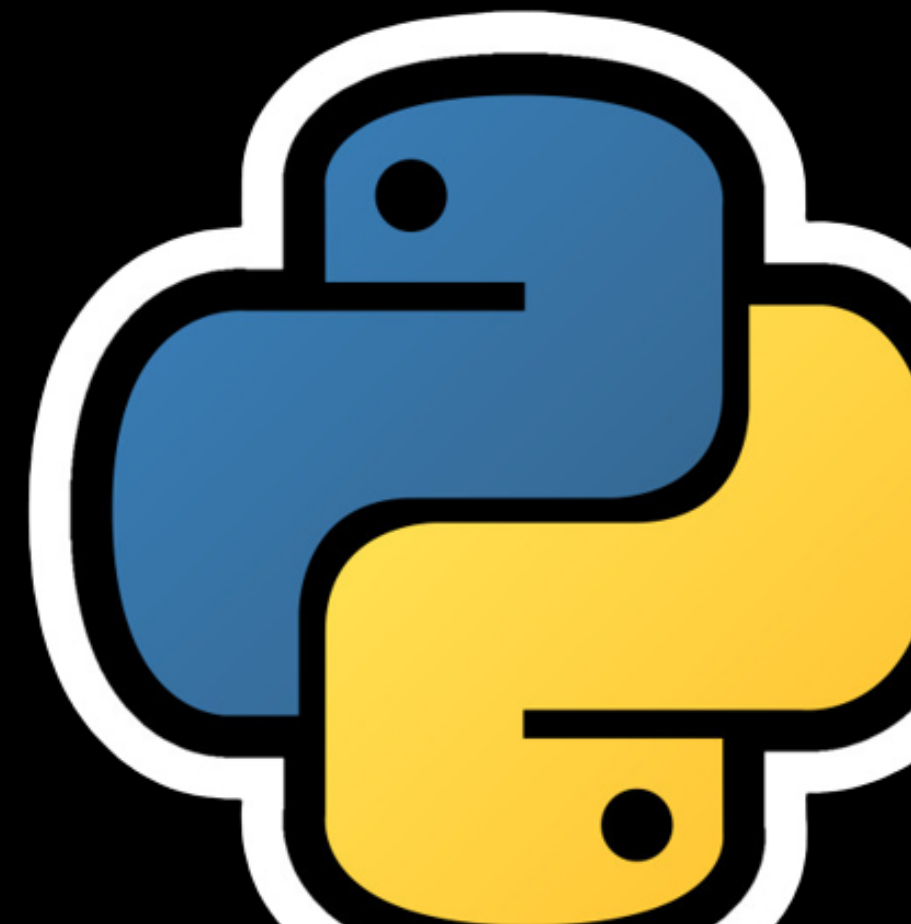
Expected Output :

number of islands

Q2. Write a progam for Regular Expression Matching

Given an input string 's' and a pattern 'p', implement regular expression matching with support for '.' and ' * ' where:
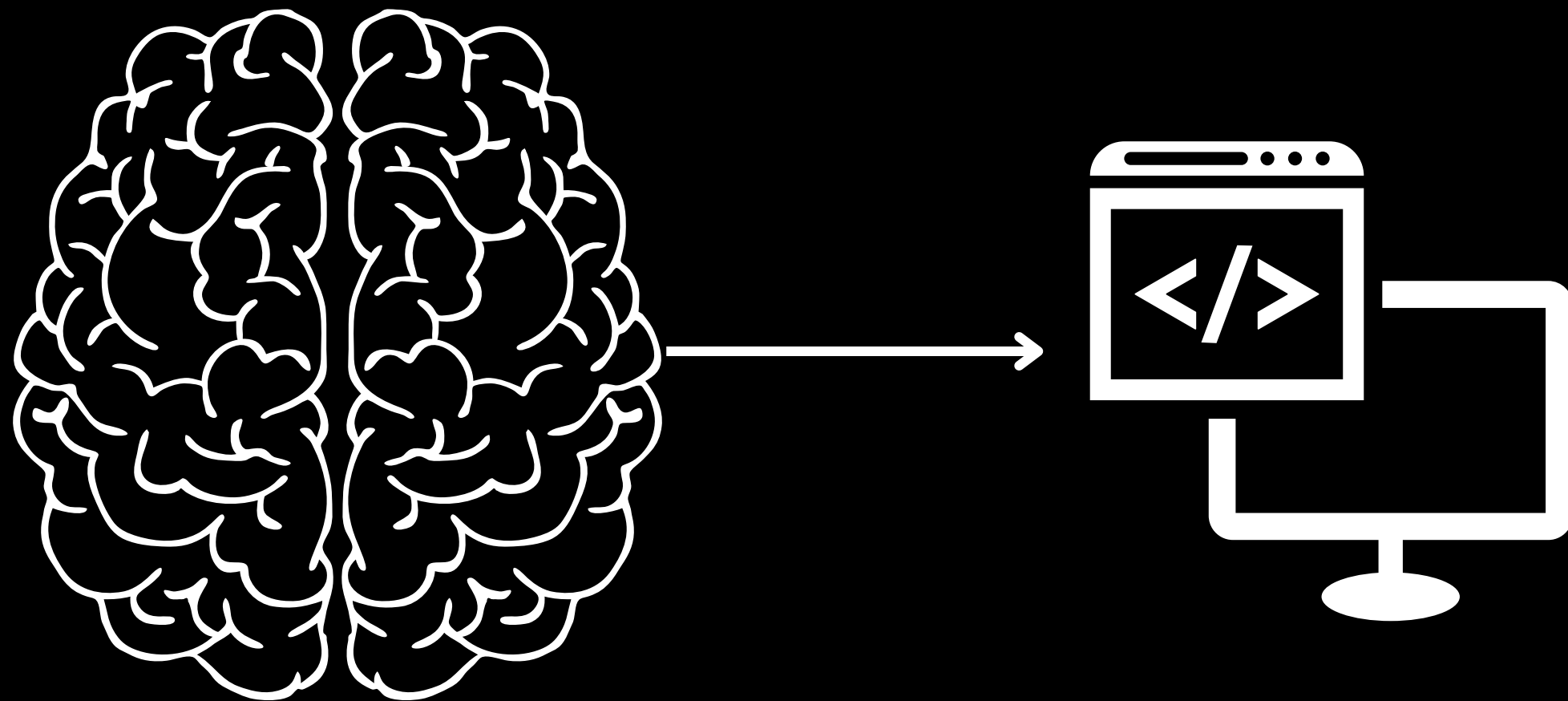
- '.' Matches any single character.
- '*' Matches zero or more of the preceding element.

The matching should cover the entire input string (not partial).

Inputs :

1. s = "aa", p = "a*"
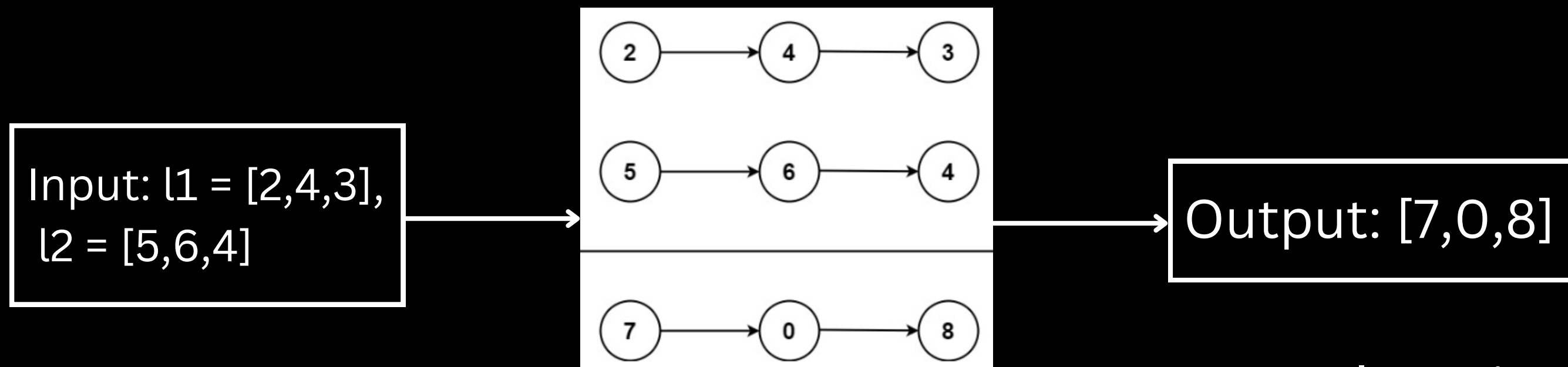2. s = "ab", p = ".*"

Expected Output :

True Or False

Q3. Write a progam to Add Two Numbers

EASY

You are given 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.

You may assume the two numbers do not contain any leading zero, except the number 0 itself.
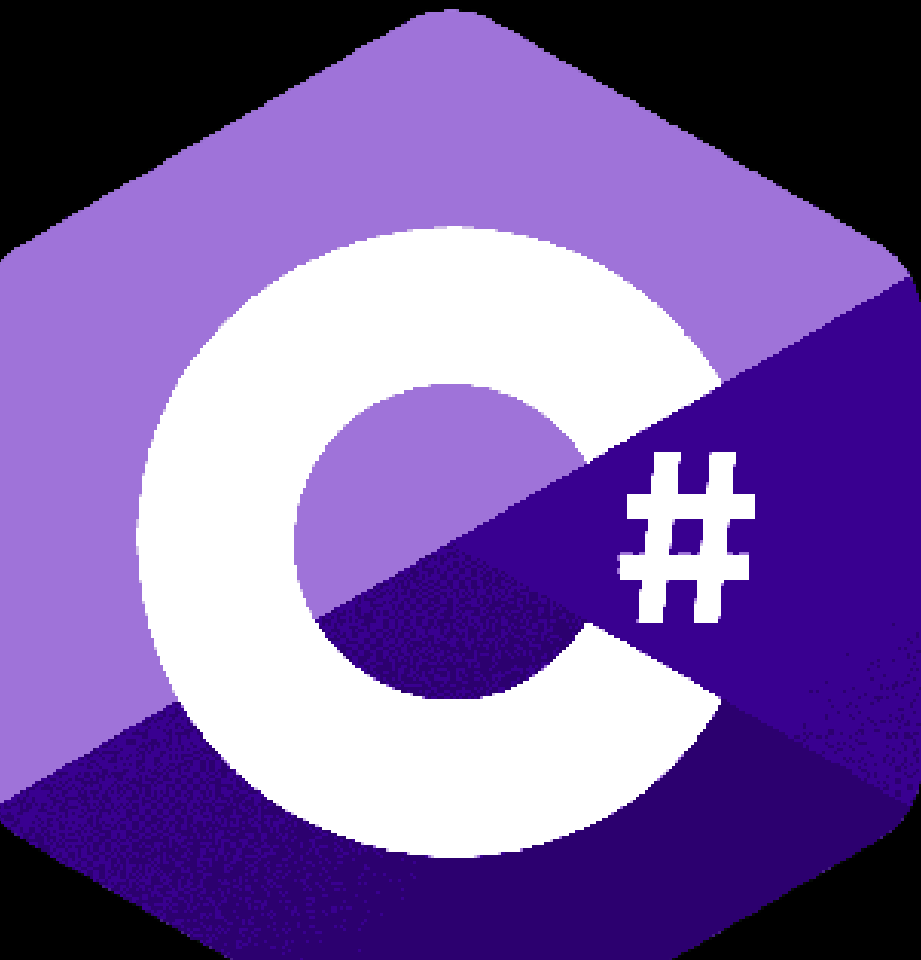
Input: l1 = [2,4,3], l2 = [5,6,4]

Output: [7,0,8]

Explanation: 342 + 465 = 807.

Inputs :

1. l1 = [2,4,6] , l2 = [3,5,6]
2. l1 = [9,9,9,9,9,9,9], l2 = [9,9,9,9]

Expected Output :

Single list as the sum

POINTS :

HARD	**10**
MEDIUM	5
EASY	3
GITHUB	1
PARTICIPANTION	1

Thank You