ROUND -1

Sr. No	Level	Questions	Input	Output	Sign
1.	E	Move all zeroes to end while keeping order of non-zero elements.	[0,1,0,3,12]	[1,3,12,0,0]	
2.	E	Compress a string.	"aaabbc"	"a3b2c1"	
3.	E	Convert a binary number (given as a string) to its decimal (base-10) equivalent.	1010101	85	
4.	E	Create a Pascal Triangle	N= 4	1 1 1 1 2 1 1 3 3 1	
5.	E	Given an integer num, return the number of steps to reduce it to zero. In one step, if the current number is even, you have to divide it by 2, otherwise, you have to subtract 1 from it.	N= 8	4	
6.	E	You are given an integer n and an integer start. Define an array nums where nums[i] = start + 2 * i Return the bitwise XOR of all elements of nums.	n = 5, start = 0	8	
7.	E	You are given an integer array nums. The unique elements of an array are the elements that appear exactly once in the array. Return the sum of all the unique elements of nums.	nums = [1,2,3,2]	4	
8.	M	Happy Number (defined by the process where you replace the number with the sum of the squares of its digits.)	1. 19 2. 11	1. True 2. False	
9.	M	Find the kth largest element in an array. (Without using in-built sorting function)	nums = [3,2,1,5,6,4] k = 2	5	
10.	M	Maximum Subarray Sum (Given an integer array nums, find the contiguous subarray (containing at least one number) which has the largest sum and return its sum.)	[-2, 1, -3, 4, -1, 2, 1, -5, 4]	Output: 6 (from [4, -1, 2, 1])	
11.	M	Sort characters in a string by frequency. (Without using in-built sorting function)	s = "tree"	"eert"	
12.	M	Convert a numeric string into an integer without using parseInt, or in-built conversion methods/class etc.	"2468"	2468	
13.	H	Return the K most frequent elements in the array	n=6, k = 2 [1, 1, 1, 2, 2, 3]	1, 2	

14.	H	You are given an n x n 2D matrix representing an image, rotate the image by 90 degrees (clockwise). You have to rotate the image in-place, which means you have to modify the input 2D matrix directly. DO NOT allocate another 2D matrix and do the rotation.	[[1,2,3], [4,5,6], [7,8,9]]	[[7,4,1], [8,5,2], [9,6,3]]	
15.	H	Given an array of integers temp represents the daily temperatures, return an array answer such that answer[i] is the number of days you have to wait after the i^{th} day to get a warmer temperature. If there is no future day for which this is possible, keep answer[i] == 0 instead. (Without Collection Class)	temp = [73,74,75,71,69,72,76,73]	[1,1,4,2,1,1,0,0]	