H&R Block

Question - 1

Problem: Index-based Array Retrieval

You are given 2 input arrays. The first array has numbers, the second array has indexes. You need to output the elements at the particular indexes within the second array.
Return the result as an array.

- Example 1:

Input: nums = [1,2,3,4], indexes = [2,0]

Output: [3,1]

- Constraints:

• 1 <= nums.length, indexes.length <= 1000

• 0 <= indexes[i] < nums.length

Question - 2

Problem: Middle Element after Removing Negatives

You are given an integer array arr. Remove all the negative numbers from the array and return the middle element. If there are 2 middle elements, return the minimum of the 2.

- Example 1:

Input: arr = [1, -2, 3, 4, -5]

Output: 3

- Example 2:

Input: arr = [10, -1, 5, 2, -3, 6]

Output: 2

- Constraints:

• 1 <= arr.length <= 10^4

• -10^5 <= arr[i] <= 10^5

Question - 3

Problem: Union and Intersection of Arrays

You are given two integer arrays arr1 and arr2. Find the union and intersection of the two arrays. If intersection does not exist, return -1 for the intersection.

- Example 1:

Input: arr1 = [1,2,3], arr2 = [2,3,4]

Output: Union = [1,2,3,4], Intersection = [2,3]

- Example 2:

Input: arr1 = [5,6], arr2 = [7,8]

Output: Union = [5,6,7,8], Intersection = -1

- Constraints:

• 1 <= arr1.length, arr2.length <= 10^3

• -10^4 <= arr1[i], arr2[i] <= 10^4

Question - 4

Problem: Epic Number

An epic number is a number in which the sum of its digits is divisible by 4. If it is not, return the next biggest number which is an epic number. If it is already epic, return the number itself.

- Example 1:

Input: n = 443

Output: 444

- Example 2:

Input: n = 808

Output: 808

- Constraints: • 1 <= n <= 10^9