



5981. All Divisions With the Highest Score of a Binary Array

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You are given a **0-indexed** binary array `nums` of length `n`. `nums` can be divided at index `i` (where $0 \leq i \leq n$) into two arrays (possibly empty) `numsleft` and `numsright`:

- `numsleft` has all the elements of `nums` between index `0` and `i - 1` (**inclusive**), while `numsright` has all the elements of `nums` between index `i` and `n - 1` (**inclusive**).
- If `i == 0`, `numsleft` is **empty**, while `numsright` has all the elements of `nums`.
- If `i == n`, `numsleft` has all the elements of `nums`, while `numsright` is **empty**.

The **division score** of an index `i` is the **sum** of the number of `0`'s in `numsleft` and the number of `1`'s in `numsright`.

Return **all distinct indices** that have the **highest possible division score**. You may return the answer in **any order**.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Medium

Example 1:

Input: `nums = [0,0,1,0]`

Output: `[2,4]`

Explanation: Division at index

- `0`: `numsleft` is `[]`. `numsright` is `[0,0,1,0]`. The score is $0 + 1 = 1$.
 - `1`: `numsleft` is `[0]`. `numsright` is `[0,1,0]`. The score is $1 + 1 = 2$.
 - `2`: `numsleft` is `[0,0]`. `numsright` is `[1,0]`. The score is $2 + 1 = 3$.
 - `3`: `numsleft` is `[0,0,1]`. `numsright` is `[0]`. The score is $2 + 0 = 2$.
 - `4`: `numsleft` is `[0,0,1,0]`. `numsright` is `[]`. The score is $3 + 0 = 3$.
- Indices 2 and 4 both have the highest possible division score 3.
Note the answer `[4,2]` would also be accepted.

Example 2:

Input: `nums = [0,0,0]`

Output: `[3]`

Explanation: Division at index

- `0`: `numsleft` is `[]`. `numsright` is `[0,0,0]`. The score is $0 + 0 = 0$.
 - `1`: `numsleft` is `[0]`. `numsright` is `[0,0]`. The score is $1 + 0 = 1$.
 - `2`: `numsleft` is `[0,0]`. `numsright` is `[0]`. The score is $2 + 0 = 2$.
 - `3`: `numsleft` is `[0,0,0]`. `numsright` is `[]`. The score is $3 + 0 = 3$.
- Only index 3 has the highest possible division score 3.

Example 3:

Input: `nums = [1,1]`

Output: `[0]`

Explanation: Division at index

- `0`: `numsleft` is `[]`. `numsright` is `[1,1]`. The score is $0 + 2 = 2$.
 - `1`: `numsleft` is `[1]`. `numsright` is `[1]`. The score is $0 + 1 = 1$.
 - `2`: `numsleft` is `[1,1]`. `numsright` is `[]`. The score is $0 + 0 = 0$.
- Only index 0 has the highest possible division score 2.

Constraints:

- $n == \text{nums.length}$
- $1 \leq n \leq 10^5$
- $\text{nums}[i]$ is either 0 or 1.

JavaScript



```
1 const maxScoreIndices = (a) => {
2   let n = a.length, zero = new Set(), one = new Set();
3   for (let i = 0; i < n; i++) a[i] == 0 ? zero.add(i) : one.add(i);
4   let cntL = 0, cntR = one.size, res = [[0, cntL + cntR]], max = cntL + cntR;
5   // pr(cntL, cntR);
6   for (let i = 0; i < n; i++) {
7     if (a[i] == 0) {
8       cntL++;
9     } else {
10      cntR--;
11    }
12    // pr(cntL, cntR);
13    max = Math.max(max, cntL + cntR);
14    res.push([i + 1, cntL + cntR])
15  }
16  // pr(max, res);
17  return res.filter(x => x[1] == max).map(x => x[0]);
18 };
```

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