

# 1073. Adding Two Negabinary Numbers

## Description

Given two numbers `arr1` and `arr2` in base  $-2$ , return the result of adding them together.

Each number is given in *array format*: as an array of 0s and 1s, from most significant bit to least significant bit. For example, `arr = [1,1,0,1]` represents the number  $(-2)^3 + (-2)^2 + (-2)^0 = -3$ . A number `arr` in *array format* is also guaranteed to have no leading zeros: either `arr == [0]` or `arr[0] == 1`.

Return the result of adding `arr1` and `arr2` in the same format: as an array of 0s and 1s with no leading zeros.

### Example 1:

Input: `arr1 = [1,1,1,1,1]`, `arr2 = [1,0,1]`

Output: `[1,0,0,0,0]`

Explanation: `arr1` represents 11, `arr2` represents 5, the output represents 16.

### Example 2:

Input: `arr1 = [0]`, `arr2 = [0]`

Output: `[0]`

### Example 3:

Input: `arr1 = [0]`, `arr2 = [1]`

Output: `[1]`

### Constraints:

- `1 <= arr1.length, arr2.length <= 1000`
- `arr1[i]` and `arr2[i]` are `0` or `1`
- `arr1` and `arr2` have no leading zeros

