# 1982. Find Array Given Subset Sums

## Description

You are given an integer `n` representing the length of an unknown array that you are trying to recover. You are also given an array `sums` containing the values of all `2^n` **subset sums** of the unknown array (in no particular order).

Return *the array* `ans` *of length* `n` *representing the unknown array. If* ***multiple*** *answers exist, return* ***any*** *of them*.

An array `sub` is a **subset** of an array `arr` if `sub` can be obtained from `arr` by deleting some (possibly zero or all) elements of `arr`. The sum of the elements in `sub` is one possible **subset sum** of `arr`. The sum of an empty array is considered to be `0`.

**Note:** Test cases are generated such that there will **always** be at least one correct answer.

### Example 1:

```
Input: n = 3, sums = [-3,-2,-1,0,0,1,2,3]
Output: [1,2,-3]
Explanation: [1,2,-3] is able to achieve the given subset sums:
- []: sum is 0
- [1]: sum is 1
- [2]: sum is 2
- [1,2]: sum is 3
- [-3]: sum is -3
- [1,-3]: sum is -2
- [2,-3]: sum is -1
- [1,2,-3]: sum is 0
Note that any permutation of [1,2,-3] and also any permutation of [-1,-2,3] will also be accepted.
```

### Example 2:

```
Input: n = 2, sums = [0,0,0,0]
Output: [0,0]
Explanation: The only correct answer is [0,0].
```

### Example 3:

```
Input: n = 4, sums = [0,0,5,5,4,-1,4,9,9,-1,4,3,4,8,3,8]
Output: [0,-1,4,5]
Explanation: [0,-1,4,5] is able to achieve the given subset sums.
```

### Constraints:

- `1 <= n <= 15`
- `sums.length == 2^n`
- `-10^4 <= sums[i] <= 10^4`