

2275. Largest Combination With Bitwise AND Greater Than Zero

Medium Topics Companies Hint

The **bitwise AND** of an array `nums` is the bitwise AND of all integers in `nums`.

- For example, for `nums = [1, 5, 3]`, the bitwise AND is equal to `1 & 5 & 3 = 1`.
- Also, for `nums = [7]`, the bitwise AND is `7`.

You are given an array of positive integers `candidates`. Evaluate the **bitwise AND** of every **combination** of numbers of `candidates`. Each number in `candidates` may only be used **once** in each combination.

Return the size of the **largest** combination of `candidates` with a bitwise AND **greater than** `0`.

Example 1:

Input: `candidates = [16,17,71,62,12,24,14]`
Output: 4
Explanation: The combination `[16,17,62,24]` has a bitwise AND of `16 & 17 & 62 & 24 = 16 > 0`. The size of the combination is 4. It can be shown that no combination with a size greater than 4 has a bitwise AND greater than 0. Note that more than one combination may have the largest size. For example, the combination `[62,12,24,14]` has a bitwise AND of `62 & 12 & 24 & 14 = 8 > 0`.

Example 2:

Input: `candidates = [8,8]`
Output: 2
Explanation: The largest combination `[8,8]` has a bitwise AND of `8 & 8 = 8 > 0`. The size of the combination is 2, so we return 2.

Constraints:

- `1 <= candidates.length <= 105`
- `1 <= candidates[i] <= 107`

Seen this question in a real interview before? 1/5

Yes No

Accepted 26.2K Submissions 36.1K Acceptance Rate 72.6%

Topics	▼
Companies	▼
Hint 1	▼
Hint 2	▼
Similar Questions	▼
Discussion (6)	▼