

# 368. Largest Divisible Subset

## Difficulty : Medium

<https://leetcode.com/problems/largest-divisible-subset>

Given a set of **distinct** positive integers `nums`, return the largest subset `answer` such that every pair  $(answer[i], answer[j])$  of elements in this subset satisfies:

- $answer[i] \% answer[j] == 0$ , OR
- $answer[j] \% answer[i] == 0$

If there are multiple solutions, return any of them.

### Example 1:

**Input:** `nums = [1,2,3]`

**Output:** `[1,2]`

**Explanation:** `[1,3]` is also accepted.

### Example 2:

**Input:** `nums = [1,2,4,8]`

**Output:** `[1,2,4,8]`

### Constraints:

- $1 \leq \text{nums.length} \leq 1000$
- $1 \leq \text{nums}[i] \leq 2 * 10^9$
- All the integers in `nums` are **unique**.