# 2453. Destroy Sequential Targets

My Submissions (/contest/biweekly-contest-90/problems/destroy-sequential-targets/submissions/)

Back to Contest (/contest/biweekly-contest-90/)

You are given a 0-indexed array nums consisting of positive integers, representing targets on a number line. You are also given an integer space.

You have a machine which can destroy targets. Seeding the machine with some nums [i] allows it to destroy all targets with values that can be represented as nums [i] + c \* space , where c is any non-negative integer. You want to destroy the maximum number of targets in nums .

Return the minimum value of nums [i] you can seed the machine with to destroy the maximum number of targets.

User Accepted:	3201
User Tried:	5402
Total Accepted:	3308
Total Submissions:	13067
Difficulty:	Medium

## Example 1:

```
Input: nums = [3,7,8,1,1,5], space = 2
Output: 1
Explanation: If we seed the machine with nums[3], then we destroy all targets equal to 1,3,5,7,9,...
In this case, we would destroy 5 total targets (all except for nums[2]).
It is impossible to destroy more than 5 targets, so we return nums[3].
```

#### Example 2:

```
Input: nums = [1,3,5,2,4,6], space = 2
Output: 1
Explanation: Seeding the machine with nums[0], or nums[3] destroys 3 targets.
It is not possible to destroy more than 3 targets.
Since nums[0] is the minimal integer that can destroy 3 targets, we return 1.
```

## Example 3:

```
Input: nums = [6,2,5], space = 100
Output: 2
Explanation: Whatever initial seed we select, we can only destroy 1 target. The minimal seed is nums[1].
```

### Constraints:

- 1 <= nums.length <= 10<sup>5</sup> •  $1 \le nums[i] \le 10^9$
- 1 <= space <= 10<sup>9</sup>

Discuss (https://leetcode.com/problems/destroy-sequential-targets/discuss)

```
JavaScript
                                                                                                                                   \boldsymbol{\varepsilon}
1 v const destroyTargets = (a, space) ⇒ {
 2
        let m = new Map(), res = 0, max = 0;
3 ,
         for (const x of a) {
 4
             let rem = x \% space;
 5
             if (!m.has(rem)) m.set(rem, []);
 6
             m.get(rem).push(x);
 7
 8 •
        for (const [, d] of m) {
 9,
             if (d.length > max) {
10
                 max = d.length;
                 res = Math.min(...d);
11
12 •
             } else if (d.length == max) {
                 res = Math.min(res, Math.min(...d));
13
14
15
        }
16
        return res;
17
    };
```

United States (/region)