

# 740. Delete and Earn

## Difficulty : Medium

<https://leetcode.com/problems/delete-and-earn>

You are given an integer array `nums`. You want to maximize the number of points you get by performing the following operation any number of times:

- Pick any `nums[i]` and delete it to earn `nums[i]` points. Afterwards, you must delete **every** element equal to `nums[i] - 1` and **every** element equal to `nums[i] + 1`.

Return *the **maximum number of points** you can earn by applying the above operation some number of times.*

### Example 1:

**Input:** `nums = [3,4,2]`

**Output:** 6

**Explanation:** You can perform the following operations:

- Delete 4 to earn 4 points. Consequently, 3 is also deleted. `nums = [2]`.
- Delete 2 to earn 2 points. `nums = []`.

You earn a total of 6 points.

### Example 2:

**Input:** `nums = [2,2,3,3,3,4]`

**Output:** 9

**Explanation:** You can perform the following operations:

- Delete a 3 to earn 3 points. All 2's and 4's are also deleted. `nums = [3,3]`.
- Delete a 3 again to earn 3 points. `nums = [3]`.
- Delete a 3 once more to earn 3 points. `nums = []`.

You earn a total of 9 points.

### Constraints:

- $1 \leq \text{nums.length} \leq 2 \cdot 10^4$
- $1 \leq \text{nums}[i] \leq 10^4$