

# 2774. Array Upper Bound

## Description

Write code that enhances all arrays such that you can call the `upperBound()` method on any array and it will return the last index of a given `target` number. `nums` is a sorted ascending array of numbers that may contain duplicates. If the `target` number is not found in the array, return `-1`.

### Example 1:

**Input:** `nums = [3,4,5]`, `target = 5`  
**Output:** `2`  
**Explanation:** Last index of target value is 2

### Example 2:

**Input:** `nums = [1,4,5]`, `target = 2`  
**Output:** `-1`  
**Explanation:** Because there is no digit 2 in the array, return -1.

### Example 3:

**Input:** `nums = [3,4,6,6,6,6,7]`, `target = 6`  
**Output:** `5`  
**Explanation:** Last index of target value is 5

### Constraints:

- `1 <= nums.length <= 104`
- `-104 <= nums[i], target <= 104`
- `nums` is sorted in ascending order.

**Follow up:** Can you write an algorithm with  $O(\log n)$  runtime complexity?

