

# 1182. Shortest Distance to Target Color

## Description

You are given an array `colors`, in which there are three colors: `1`, `2` and `3`.

You are also given some queries. Each query consists of two integers `i` and `c`, return the shortest distance between the given index `i` and the target color `c`. If there is no solution return `-1`.

### Example 1:

**Input:** `colors = [1,1,2,1,3,2,2,3,3]`, `queries = [[1,3],[2,2],[6,1]]`

**Output:** `[3,0,3]`

**Explanation:**

The nearest 3 from index 1 is at index 4 (3 steps away).

The nearest 2 from index 2 is at index 2 itself (0 steps away).

The nearest 1 from index 6 is at index 3 (3 steps away).

### Example 2:

**Input:** `colors = [1,2]`, `queries = [[0,3]]`

**Output:** `[-1]`

**Explanation:** There is no 3 in the array.

### Constraints:

- `1 <= colors.length <= 5*10^4`
- `1 <= colors[i] <= 3`
- `1 <= queries.length <= 5*10^4`
- `queries[i].length == 2`
- `0 <= queries[i][0] < colors.length`
- `1 <= queries[i][1] <= 3`

