

## 27. Remove element:

I/P: nums = [3, 2, 2, 3] val = 3    (X) In-place array.

O/P: 2, nums = [2, 2, -, -]

Explanation: your function should return k=2, with first two elements of nums being 2. It does not matter you leave beyond the returned k (hence they are underscores).

class Solution {

public int removeElement (int[] nums, int val) {

int k = 0;

for (int i = 0; i < nums.length; i++) {

nums[i] != val;

nums[k] = nums[i];

k++;

}

}

return k;

}

}

Time  $\rightarrow O(n)$  space  $\rightarrow O(1)$

## Dry run:

1. i = 0    nums[i] = 3    3 != 3 x    k = 0

2. i = 1    nums[i] = 2    2 != 3 ✓    k = 1

3. i = 2    nums[i] = 2    2 != 3 ✓    k = 2

4. i = 3    nums[i] = 3    3 != 3 x    k = 2.