

```

class Solution {
    public int[] searchRange(int[] nums, int target) {
        int[] res = new int[2];
        res[0] = -1; res[1] = -1;

        if (nums == null || nums.length == 0 ||
            nums[0] > target || nums[nums.length - 1] < target){
            return res;
        }

        res[0] = findFirst(nums, target);
        res[1] = findLast(nums, target);
        return res;
    }

    public int findFirst(int[] nums, int target){
        int start = 0; int end = nums.length - 1;
        while(start + 1 < end){
            int mid = (start + end) / 2;

            if (nums[mid] < target){
                start = mid;
            } else {
                end = mid;
            }
        }

        if (nums[start] == target) return start;
        else {
            if (nums[end] == target) return end;
            else return -1;
        }
    }

    public int findLast(int[] nums, int target){
        int start = 0; int end = nums.length - 1;
        while(start + 1 < end){
            int mid = (start + end) / 2;

            if (nums[mid] > target){
                end = mid;
            } else {
                start = mid;
            }
        }
        if (nums[end] == target) return end;
        else {
            if (nums[start] == target) return start;
            else return -1;
        }
    }
}

```

Better solutions:

```
/*
public int[] searchRange(int[] nums, int target) {
    int left = 0, right = nums.length - 1;
    while (left <= right) {
        int mid = left + (right - left) / 2;
        if (nums[mid] == target) {
            return findRange(nums, mid);
        } else if (nums[mid] < target) {
            left = mid + 1;
        } else {
            right = mid - 1;
        }
    }
    return new int[] {-1, -1};
}

private int[] findRange(int[] nums, int index) {
    int start = index;
    while (start > 0 && nums[start] == nums[start - 1])
        start--;
    int end = index;
    while (end < nums.length - 1 && nums[end] == nums[end + 1])
        end++;
    return new int[] {start, end};
}
*/
}
```