

# Problem 163: Missing Ranges

## Problem Information

**Difficulty:** Easy

**Acceptance Rate:** 35.48%

**Paid Only:** Yes

**Tags:** Array

## Problem Description

You are given an inclusive range `[lower, upper]` and a **sorted unique** integer array `nums`, where all elements are within the inclusive range.

A number `x` is considered **missing** if `x` is in the range `[lower, upper]` and `x` is not in `nums`.

Return **the shortest sorted** list of ranges that **exactly covers** all the missing numbers. That is, no element of `nums` is included in any of the ranges, and each missing number is covered by one of the ranges.

**Example 1.**

**Input:** `nums = [0,1,3,50,75], lower = 0, upper = 99` **Output:** `[[2,2],[4,49],[51,74],[76,99]]`

**Explanation:** The ranges are: `[2,2]` `[4,49]` `[51,74]` `[76,99]`

**Example 2.**

**Input:** `nums = [-1], lower = -1, upper = -1` **Output:** `[]` **Explanation:** There are no missing ranges since there are no missing numbers.

**Constraints:**

`-109 <= lower <= upper <= 109` `0 <= nums.length <= 100` `lower <= nums[i] <= upper`  
All the values of `nums` are **unique**.

## Code Snippets

### C++:

```
class Solution {
public:
    vector<vector<int>> findMissingRanges(vector<int>& nums, int lower, int
    upper) {

    }
};
```

### Java:

```
class Solution {
    public List<List<Integer>> findMissingRanges(int[] nums, int lower, int
    upper) {

    }
}
```

### Python3:

```
class Solution:
    def findMissingRanges(self, nums: List[int], lower: int, upper: int) ->
    List[List[int]]:
```