

# 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]]:
```