

Problem 1288: Remove Covered Intervals

Problem Information

Difficulty: Medium

Acceptance Rate: 56.13%

Paid Only: No

Tags: Array, Sorting

Problem Description

Given an array `intervals` where `intervals[i] = [li, ri]` represent the interval `[li, ri]`, remove all intervals that are covered by another interval in the list.

The interval `[a, b)` is covered by the interval `[c, d)` if and only if `c <= a` and `b <= d`.

Return _the number of remaining intervals_.

Example 1:

Input: intervals = [[1,4],[3,6],[2,8]] **Output:** 2 **Explanation:** Interval [3,6] is covered by [2,8], therefore it is removed.

Example 2:

Input: intervals = [[1,4],[2,3]] **Output:** 1

Constraints:

* `1 <= intervals.length <= 1000` * `intervals[i].length == 2` * `0 <= li < ri <= 105` * All the given intervals are **unique**.

Code Snippets

C++:

```
class Solution {  
public:  
    int removeCoveredIntervals(vector<vector<int>>& intervals) {  
  
    }  
};
```

Java:

```
class Solution {  
public int removeCoveredIntervals(int[][] intervals) {  
  
}  
}
```

Python3:

```
class Solution:  
    def removeCoveredIntervals(self, intervals: List[List[int]]) -> int:
```