

# Problem 435: Non-overlapping Intervals

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 56.31%

**Paid Only:** No

**Tags:** Array, Dynamic Programming, Greedy, Sorting

## Problem Description

Given an array of intervals `intervals` where `intervals[i] = [starti, endi]`, return \_the minimum number of intervals you need to remove to make the rest of the intervals non-overlapping\_.

**Note** that intervals which only touch at a point are **non-overlapping**. For example, `[1, 2]` and `[2, 3]` are non-overlapping.

**Example 1:**

**Input:** intervals = [[1,2],[2,3],[3,4],[1,3]] **Output:** 1 **Explanation:** [1,3] can be removed and the rest of the intervals are non-overlapping.

**Example 2:**

**Input:** intervals = [[1,2],[1,2],[1,2]] **Output:** 2 **Explanation:** You need to remove two [1,2] to make the rest of the intervals non-overlapping.

**Example 3:**

**Input:** intervals = [[1,2],[2,3]] **Output:** 0 **Explanation:** You don't need to remove any of the intervals since they're already non-overlapping.

**Constraints:**

$1 \leq \text{intervals.length} \leq 10^5$   
 $\text{intervals}[i].\text{length} == 2$   
 $-5 \leq \text{starti} < \text{endi} \leq 5$

## Code Snippets

### C++:

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

### Java:

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

### Python3:

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