452. Minimum Number of Arrows to Burst Balloons

Description

There are some spherical balloons taped onto a flat wall that represents the XY-plane. The balloons are represented as a 2D integer array `points` where `points[i] = [x start , x end ]` denotes a balloon whose **horizontal diameter** stretches between `x start` and `x end` . You do not know the exact y-coordinates of the balloons.

Arrows can be shot up **directly vertically** (in the positive y-direction) from different points along the x-axis. A balloon with `x start` and `x end` is **burst** by an arrow shot at `x` if `x start <= x <= x end` . There is **no limit** to the number of arrows that can be shot. A shot arrow keeps traveling up infinitely, bursting any balloons in its path.

Given the array `points` , return *the **minimum** number of arrows that must be shot to burst all balloons* .

Example 1:

```
Input: points = [[10,16],[2,8],[1,6],[7,12]]
Output: 2
Explanation: The balloons can be burst by 2 arrows:
- Shoot an arrow at x = 6, bursting the balloons [2,8] and [1,6].
- Shoot an arrow at x = 11, bursting the balloons [10,16] and [7,12].
```

Example 2:

```
Input: points = [[1,2],[3,4],[5,6],[7,8]]
Output: 4
Explanation: One arrow needs to be shot for each balloon for a total of 4 arrows.
```

Example 3:

```
Input: points = [[1,2],[2,3],[3,4],[4,5]]
Output: 2
Explanation: The balloons can be burst by 2 arrows:
- Shoot an arrow at x = 2, bursting the balloons [1,2] and [2,3].
- Shoot an arrow at x = 4, bursting the balloons [3,4] and [4,5].
```

Constraints:

- `1 <= points.length <= 10 5`
- `points[i].length == 2`
- `-2 31 <= x start < x end <= 2 31 - 1`