Given a set of intervals, for each of the interval i, check if there exists an interval j whose start point is bigger than or equal to the end point of the interval i, which can be called that j is on the "right" of i.

For any interval i, you need to store the minimum interval j's index, which means that the interval j has the minimum start point to build the "right" relationship for interval i. If the interval j doesn't exist, store -1 for the interval i. Finally, you need output the stored value of each interval as an array.

**Note:**

1. You may assume the interval's end point is always bigger than its start point.
2. You may assume none of these intervals have the same start point.

**Example 1:**

**Input:** [ [1,2] ]

**Output:** [-1]

**Explanation:** There is only one interval in the collection, so it outputs -1.

**Example 2:**

**Input:** [ [3,4], [2,3], [1,2] ]

**Output:** [-1, 0, 1]

**Explanation:** There is no satisfied "right" interval for [3,4].

For [2,3], the interval [3,4] has minimum-"right" start point;

For [1,2], the interval [2,3] has minimum-"right" start point.

**Example 3:**

**Input:** [ [1,4], [2,3], [3,4] ]

**Output:** [-1, 2, -1]

**Explanation:** There is no satisfied "right" interval for [1,4] and [3,4].

For [2,3], the interval [3,4] has minimum-"right" start point.

**NOTE:** input types have been changed on April 15, 2019. Please reset to default code definition to get new method signature.