

2410. Maximum Matching of Players With Trainers

Description

You are given a **0-indexed** integer array `players`, where `players[i]` represents the **ability** of the `ith` player. You are also given a **0-indexed** integer array `trainers`, where `trainers[j]` represents the **training capacity** of the `jth` trainer.

The `ith` player can **match** with the `jth` trainer if the player's ability is **less than or equal to** the trainer's training capacity. Additionally, the `ith` player can be matched with at most one trainer, and the `jth` trainer can be matched with at most one player.

Return *the maximum number of matchings between `players` and `trainers` that satisfy these conditions.*

Example 1:

Input: `players = [4,7,9]`, `trainers = [8,2,5,8]`

Output: 2

Explanation:

One of the ways we can form two matchings is as follows:

- `players[0]` can be matched with `trainers[0]` since $4 \leq 8$.
- `players[1]` can be matched with `trainers[3]` since $7 \leq 8$.

It can be proven that 2 is the maximum number of matchings that can be formed.

Example 2:

Input: `players = [1,1,1]`, `trainers = [10]`

Output: 1

Explanation:

The trainer can be matched with any of the 3 players.

Each player can only be matched with one trainer, so the maximum answer is 1.

Constraints:

- $1 \leq \text{players.length}, \text{trainers.length} \leq 10^5$
- $1 \leq \text{players}[i], \text{trainers}[j] \leq 10^9$

