

1947. Maximum Compatibility Score Sum

Description

There is a survey that consists of `n` questions where each question's answer is either `0` (no) or `1` (yes).

The survey was given to `m` students numbered from `0` to `m - 1` and `m` mentors numbered from `0` to `m - 1`. The answers of the students are represented by a 2D integer array `students` where `students[i]` is an integer array that contains the answers of the `ith` student (**0-indexed**). The answers of the mentors are represented by a 2D integer array `mentors` where `mentors[j]` is an integer array that contains the answers of the `jth` mentor (**0-indexed**).

Each student will be assigned to **one** mentor, and each mentor will have **one** student assigned to them. The **compatibility score** of a student-mentor pair is the number of answers that are the same for both the student and the mentor.

- For example, if the student's answers were `[1, 0, 1]` and the mentor's answers were `[0, 0, 1]`, then their compatibility score is 2 because only the second and the third answers are the same.

You are tasked with finding the optimal student-mentor pairings to **maximize** the **sum of the compatibility scores**.

Given `students` and `mentors`, return *the maximum compatibility score sum that can be achieved*.

Example 1:

```
Input: students = [[1,1,0],[1,0,1],[0,0,1]], mentors = [[1,0,0],[0,0,1],[1,1,0]]
Output: 8
Explanation: We assign students to mentors in the following way:
- student 0 to mentor 2 with a compatibility score of 3.
- student 1 to mentor 0 with a compatibility score of 2.
- student 2 to mentor 1 with a compatibility score of 3.
The compatibility score sum is 3 + 2 + 3 = 8.
```

Example 2:

```
Input: students = [[0,0],[0,0],[0,0]], mentors = [[1,1],[1,1],[1,1]]
Output: 0
Explanation: The compatibility score of any student-mentor pair is 0.
```

Constraints:

- `m == students.length == mentors.length`
- `n == students[i].length == mentors[j].length`
- `1 <= m, n <= 8`
- `students[i][k]` is either `0` or `1`.
- `mentors[j][k]` is either `0` or `1`.

