

Zoomcar Hiring Challenge

12 questions Max. Marks 210.0



10 Multiple-Choice Questions

1. What is the purpose of yield?
2. Does Ruby support constructors?
3. The difference between == and === ?
4. Write syntax to get "Welcomes You!" with using JavaScript?
5. SQL views can be used to hide:
6. Which of the following is NOT a type of SQL constraint?
7. Which of the following statement is false?
8. The term "push" and "pop" is related to the
9. What will you do to treat the constant 3.14 as a long double?
10. Which of the following technique is faster for travelling in binary trees?

2 Programming Questions

11. Course of Study
12. Utkarsh and Jumps

1 Course of Study Max. Marks 100

You are now studying in IIN and have to follow the curriculum. Here is how the curriculum is structured.

There are a total of n faculties in this institute. The i^{th} faculty has m_i different courses under his mentor-ship. Every course under a particular faculty might have some topics in common. Hence each course, under each faculty, have been given "**Conceptual points**", which indicate the level of toughness of that course. To **qualify** a course x , taught under faculty i , you first have to **qualify all the courses y** , taught under **same** faculty, such that the **Conceptual Points** of all y 's is less than **Conceptual points** of x .

As per the rule, you have to complete every course that university offers, **one at a time**. Also, at any moment, when you select a new course, you will select only from those courses, which you can **qualify at that time**.

You can choose any course, under any faculty, in any semester, as long as above condition holds. A schedule is valid if all the courses taken as per the schedule do not violate the conditions mentioned above.

Note that all the courses are distinct and any 2 courses under different faculties have no dependency whatsoever.

Find total number of possible valid schedules. As answer can be large, output it modulo $10^9 + 7$.

Input:

The first line of input will contain an integer n , the number of faculties. Next n lines each will first contain a letter m_i , the number of courses under faculty i . The m_i space separated integers will follow in the same line, where j^{th} integer x_j will indicate the Conceptual Level of j^{th} course under i^{th} faculty.

Output:

Output the required answer modulo $10^9 + 7$.

Constraints: