July 2023 CSE 208
Online 3 Max Flow Set 2

Time: 25min Mark: 10

Statement:

There are M jobs and N applicants. Each applicant can do some jobs. Your task is to assign these jobs to the applicants so that maximum applicants get a job. Given the condition is one applicant will be assigned one job and vice versa.

Input:

First line of input contains 2 integers N and M– denoting respectively the number of applicants and the number of jobs. You can assign IDs 1-N to N applicants and IDs 1-M to M jobs.

Each of the next M lines contains space separated integers. First of which represent the job ID followed by the applicant IDs applied for that job.

Output:

Maximum number of jobs that can be assigned to the applicants.

Sample input/output:

Sample input	Sample output
4 3 1 1 2 2 3 3 3 4	3
3 3 1 2 3 3 1 2	2

Explanation of sample 1:

In the above input there are 4 applicants and 3 jobs.

Job 1 has 2 applications from applicant 1 and 2.

Job 2 has only 1 application from applicant 3.

Job 3 has 2 applications from applicant 3 and 4.