CISC-365 2009 Lab # 10 Week of November 16

You have been hired by the Prime Minister's office to assign cabinet posts to a group of new MPs. None of them are particularly suited to any of the jobs – your goal is to minimize the total amount of damage that will be done. Each person must be assigned to a job, and each job must be filled – luckily the number of candidates and jobs is exactly equal.

(Yes, this is exactly the problem we looked at in class, and solved. This lab is very simple: implement this solution.)

Input consists of a text file containing a number of instances of the problem. The first line contains a single integer specifying the number of instances. The remainder of the lines are in groups. The first line of a group contains a single integer specifying the number of jobs (and people) in the instance. The rest of the lines in the group contain the matrix of person/job costs – each row corresponds to a particular person.

For example, the input file might look like

2			
3			
7	1	9	
3	3	3	
2	8	5	
4			
8	6	9	6
5	4	7	6
1	7	5	2
6	4	7	4