Problem A. Organizing SWERC

Source file name:	Organizing.c, Organizing.cpp, Organizing.java, Organizing.py
Input:	`Standard`
Output:	`Standard`

Gianni, SWERC's chief judge, received a huge amount of high quality problems from the judges and now he has to choose a problem set for SWERC.

He received n problems and he assigned a beauty score and a difficulty to each of them. The i-th problem has beauty score equal to b_i and difficulty equal to d_i. The beauty and the difficulty are integers between 1 and 10.

If there are no problems with a certain difficulty (the possible difficulties are 1, 2, ..., 10) then Gianni will ask for more problems to the judges.

Otherwise, for each difficulty between 1 and 10, he will put in the problem set one of the most beautiful problems with such difficulty (so the problem set will contain exactly 10 problems with distinct difficulties). You shall compute the total beauty of the problem set, that is the sum of the beauty scores of the problems chosen by Gianni.

Input

Each test contains multiple test cases. The first line contains an integer t ($1 \leq t \leq 100$) – the number of test cases. The descriptions of the t test cases follow.

The first line of each test case contains the integer n ($1 \leq n \leq 100$) – how many problems Gianni received from the judges.

The next n lines contain two integers each. The i-th of such lines contains b_i and d_i ($1 \leq b_i,\ d_i \leq 10$) – the beauty score and the difficulty of the i-th problem.

Output

For each test case, print the total beauty of the problem set chosen by Gianni. If Gianni cannot create a problem set (because there are no problems with a certain difficulty) print the string `MOREPROBLEMS` (all letters are uppercase, there are no spaces).

Example

Input	Output
2 3 8 4 9 3 6 7 12 3 10 10 1 10 2 10 3 10 4 3 10 10 5 10 6 10 7 10 8 10 9 1 10	MOREPROBLEMS 93

Explanation

In the **first test case**, Gianni has received only 3 problems, with difficulties 3, 4, 7 which are not sufficient to create a problem set (for example because there is not a problem with difficulty 1).

In the **second test case**, Gianni will create a problem set by taking the problems 2, 3, 4, 5, 7, 8, 9, 10, 11 (which have beauty equal to 10 and all difficulties from 1 to 9) and one of the problems 1 and 6 (which have both beauty 3 and difficulty 10). The total beauty of the resulting problem set is $10 \cdot 9 + 3 = 93$.