1176 – Getting a T-shirt

In programming contests, a common problem for the contestants is to get a suited T-shirt. Sometimes people gets too long or too short T-shirts. So, this time I have planned to ask the authority to manage the T-shirts such that everyone gets a suitable one. From my past experience, it's known that there are 6 available sizes of T-shirts and they are XXL, XL, L, M, S, and XS. And exactly two sizes of the T-shirts suit a person.

Now, for a contest there are T-shirts of **N** colors and **M** contestants. And for each color, all the 6 sizes are available. So, there are **6*N** T-shirts. And you are given the suitable sizes for each contestant. You have to distribute the T-shirts to the contestants such that everyone gets a suitable size. Only size matters, color is not an issue. Now you have to decide whether it's possible or not.

Input

Input starts with an integer **T (≤ 50)**, denoting the number of test cases.

The first line of each test case contains two integers **N** and **M**, separated by spaces, with **1 ≤ N, M ≤ 50**. Each of the next **M** lines will contain two sizes as described earlier.

Output

For each case, print the case number and **"YES"** or **"NO"** depending on whether it's possible to distribute the T-shirts or not.

Sample Input	Output for Sample Input
3 3 6 L XL XL L XXL XL S XS M S M L 1 4 S XL L S L XL L XL 1 1 L M	Case 1: YES Case 2: NO Case 3: YES