# 12981   Secret Master Plan

Master Mind KongMing gave Fei Zhang a secret master plan stashed in a pocket. The plan instructs how to deploy soldiers on the four corners of the city wall. Unfortunately, when Fei opened the pocket he found there are only four numbers written in dots on a piece of sheet. The numbers form a 2×2 matrix, but Fei didn't know the correct direction to hold the sheet. What a pity!

Given two secret master plans. The first one is the master's original plan. The second one is the plan opened by Fei. As KongMing had many pockets to hand out, he might give Fei the wrong pocket. Determine if Fei receives the right pocket.
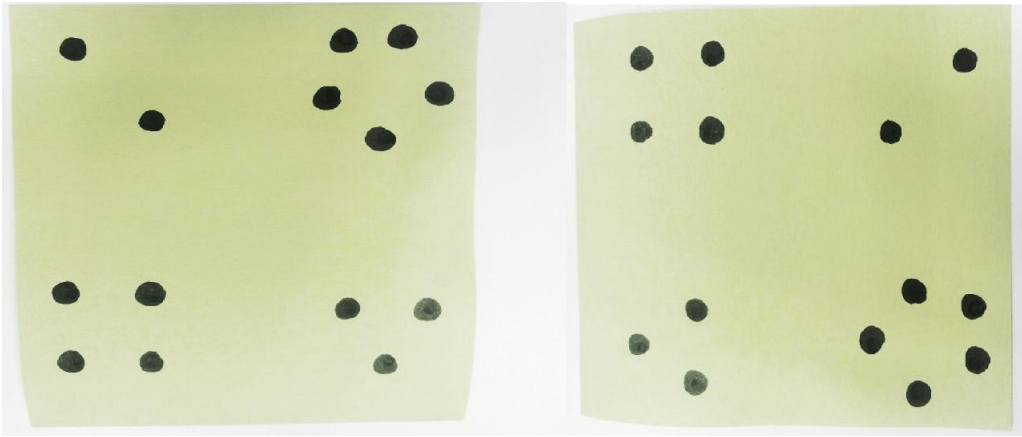
Input

The first line of the input gives the number of test cases, T ($1 \le T \le 10^4$). T test cases follow. Each test case contains 4 lines. Each line contains two integers a_{i0} and a_{i1} ($1 \le a_{i0}, a_{i1} \le 100$). The first two lines stands for the original plan, the 3rd and 4th line stands for the plan Fei opened.

Output

For each test case, output one line containing 'Case #x: y', where x is the test case number (starting from 1) and y is either 'POSSIBLE' or 'IMPOSSIBLE' (quotes for clarity).

Sample Input

```
4
1 2
3 4
1 2
3 4

1 2
3 4
3 1
4 2

1 2
3 4
```

```
3 2
4 1

1 2
3 4
4 3
2 1
```

Sample Output

```
Case #1: POSSIBLE
Case #2: POSSIBLE
Case #3: IMPOSSIBLE
Case #4: POSSIBLE
```