# Five in a row

# Time limit: 2 sec.

**Problem Description**

判斷目前棋盤狀態為哪一種。狀態一共分為四種，分別為已輸、下在某處可贏、 下一步一定輸、下在某處則未定輸贏。五子棋顧名思義，當五顆棋子相連就算贏，超過五顆棋相連不算贏。

**Input Format**

第一行是測資筆數N。每筆測資二十行：第一行是一個整數F代表下一步棋是黑先或者白先，黑棋為2，白棋為1。第二行至第二十行代表是19列19行的棋盤，每一行有19個整數，整數為0表示無棋子，整數為1表示有白棋，整數為2表示有黑棋。整數與整數之間以空格隔開。

**Output Format.**

每筆測資輸出目前棋盤之狀態，狀態為已輸則輸出1與一個整數L代表輸方，黑棋為2，白棋為1，整數中間以空格隔開。 狀態為下在某處可贏則輸出2與兩個整數R、C表示位置，R代表列，C代表行，如果有多個位置，則依照此格式：R1 C1 R2 C2…Rk Ck，其中 ，當 時，，整數中間以空格隔開。 狀態為下一步一定輸則輸出3。 狀態為下在某處則未定輸贏則輸出4與兩個整數R、C代表位置，R代表列、C代表行，整數中間以空格隔開。每筆測資輸出以空行隔開。

**Sample Input:**

4

1

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0 0 0 0 0 0 0 0 0 0 0 0 2 0 2 2 0 0 0

0 0 0 0 0 0 0 0 0 0 0 2 2 1 2 0 0 0 0

0 0 0 0 0 0 0 0 0 0 0 0 1 2 1 0 0 0 0

0 0 0 0 0 0 0 0 0 0 0 1 2 1 1 0 0 0 0

0 0 0 0 0 0 0 0 0 0 1 1 0 0 0 0 0 0 0

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**Sample Output**

1 1

2 6 17

3

4 6 17