

Queen

Say if two queens of a chessboard are in contact with each other, assuming to code the positions with **(xa, ya)**, **(xb, yb)** with numbers from 1 to 8.

Input

The first line contains the position of the first queen (xa ya).

The second line contains the position of the second queen (xb yb).

Output

The first line contains CATCH or NOT CATCH.

Sample input

Sample output

3 4 4 3	CATCH
4 4 8 8	CATCH
5 3 8 7	NOT CATCH