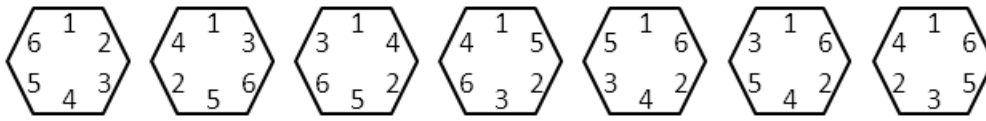
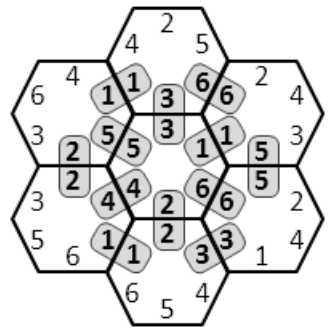
A *hexagonal piece* is a hexagon whose sides are labeled with distinct integers values between 1 and 6. A *Hexagonal Puzzle* is a set of seven hexagonal pieces, e.g.,



A *Hexagonal Puzzle* is *solvable* if and only if its pieces can be translated and rotated, without reflecting or flipping any of them, to form a honeycomb pattern where neighboring sides of any two pieces are labeled with the same integer values. The following figure depicts a honeycomb pattern witnessing the fact that the above hexagonal puzzle is solvable:



Your task is to determine if a given Hexagonal Puzzle is solvable or not.

Input

The input contains several test cases, each one of them corresponding to the description of a Hexagonal Puzzle. A case comprises seven lines, each one containing a blank-separated permutation of the numbers $1, 2, \ldots, 6$ indicating the clockwise labeling of the sides of a hexagonal piece of the puzzle.

Output

For each case print one line with the word '`YES`' if the given Hexagonal Puzzle is solvable, or the word '`NO`' otherwise. Answers should be left aligned.

Sample Input

```
1 2 3 4 5 6
1 3 6 5 2 4
1 4 2 5 6 3
1 5 2 3 6 4
1 6 2 4 3 5
1 6 2 4 5 3
1 6 5 3 2 4
1 2 3 4 5 6
1 2 3 4 5 6
1 2 3 4 5 6
1 2 3 4 5 6
1 2 3 4 5 6
1 2 3 4 5 6
1 2 3 4 5 6
```

Sample Output

```
YES
NO
```