

## Problem -1

Four players participate in the playoff tournament. The tournament is held according to the following scheme - the first player will play with the second, and the third player with the fourth, then the winners of the pairs will play in the finals of the tournament.

It is known that in a match between two players, the one whose skill is greater will win. The tournament is called **fair** if the two players with the highest skills meet in the finals. Determine whether the given tournament is **fair**.

Output YES if the tournament is **fair**, or NO otherwise.

The skill of the first, second, third and fourth player is between 1-100.

>> Sample input -

3 7 9 5

4 5 6 9

5 3 8 1

6 5 3 2

>> Sample output -

YES

NO

YES

NO

## Problem -2

There are three cards on the desk, each with a positive integer written on it. The integers on the cards are A, B, and C. You have chosen two cards and picked them up. Find the maximum possible sum of the integers written on the picked cards.

The range of the A,B,C -> 1-100

>> Sample input -

3 4 5

6 6 6

99 99 98

>> Sample output -

9

12

198

## Problem -3

Mr. A has a grid that has  $N$  rows and  $M$  columns. Each row is numbered from 1 to  $N$  from top to bottom. Each column is numbered from 1 to  $M$  from left to right.

Each tile in the grid contains a number. The numbers are arranged as follows:

Row 1 contains integers from 1 to  $M$  from left to right.

Row 2 contains integers from  $M+1$  to  $2 \times M$  from left to right.

Row 3 contains integers from  $2 \times M + 1$  to  $3 \times M$  from left to right.

And so on until row  $N$ .

A domino is defined as two different tiles in the grid that touch by their sides. A domino is said to be tight if and only if the two numbers in the domino have a difference of exactly 1. Count the number of distinct tight dominoes in the grid.

Two dominoes are said to be distinct if and only if there exists at least one tile that is in one domino, but not in the other.

The range of the  $M, N \rightarrow 1-100$  (Positive Value)

>> Sample input -

3 4

2 1

>> Sample output -

9

1