

# Line Segment Intersection

## Assignment 1

Computer Programming

Due date: 10 September, 2018

**Description:** Given two line segments find if they intersect at some point.

**Input:**

First Line contains T, number of test cases Each of following T lines have 8 integers

$(x_1, y_1), (x_2, y_2), (x_3, y_3), (x_4, y_4)$  first four integers represent the co-ordinates of end points of first line segment and last four integers represent the co-ordinates of end points of second line segment.

**Output:**

Print "Yes" if both line segments intersect, else print "No" if they don't intersect without quotes.

**Constraints:**

$1 \leq T \leq 10^5$ .

Each co-ordinate is an integer between  $-10^9$  and  $10^9$  (Both Inclusive).

**Sample Test Case**

Input	Output
2	Yes
0 0 4 4 1 2 1 -5	No
0 0 4 4 4 0 5 9	