

Two intervals

Input file: standard input
Output file: standard output
Time limit: 1 second
Memory limit: 256 megabytes

Given the boundaries of **2** intervals. Print the boundaries of their **intersection**.

Note: **Boundaries** mean the two ends of an interval which are the starting number and the ending number.

Input

Only one line contains two intervals $[l_1, r_1]$, $[l_2, r_2]$ where $(1 \leq l_1, l_2, r_1, r_2 \leq 10^9)$, $(l_1 \leq r_1, l_2 \leq r_2)$.

It's guaranteed that $l_1 \leq r_1$ and $l_2 \leq r_2$.

Output

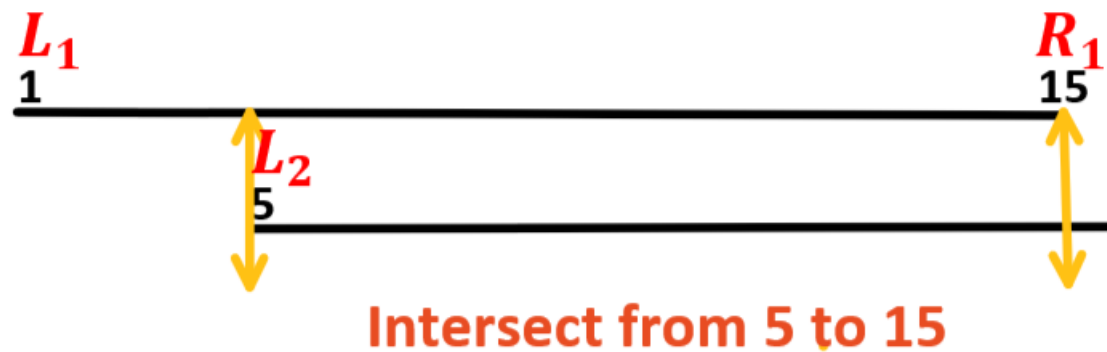
If there is an **intersection** between these **2** intervals print its boundaries , otherwise print **-1**.

Examples

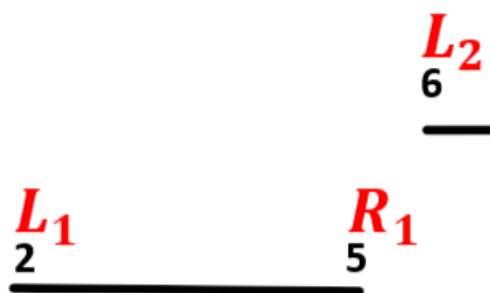
standard input	standard output
1 15 5 27	5 15
2 5 6 12	-1

Note

First Example :



Second Example :



There are No intersections