For any real numbers $a$, $b$ with $a < b$, let $[a, b]$ denote the closed interval with end points $a$ and $b$. Given any finite collection of closed intervals

$$[a_1, b_1], [a_2, b_2], \ldots, [a_n, b_n]$$

such that any two of them have at least one point in common, show that there must be some point common to all the intervals.

- Solvers should include their name, address, and status at the College. Solutions can be mailed to MSC 110 via campus mail or placed in Yung-Pin Chen’s mailbox in the Math Department Office. Solutions to the above Problem of the Week should be received by 5:00 p.m. Monday, March 12, 2018.

- We did not receive a solution for Problem of the Week #6, except a solution provided by the problem contributor.