## [082] Prerequisites: [07C], [07D], [07N]. (Solved on 2023-01-17) Let X be a

Exercises

**Solution 1.** [083]

well-ordered set. Show that if  $I \subseteq X$  is an interval then I = [a, b) or I = [a, b] or  $I = [a, \infty)$  with  $a, b \in X$ . (The reverse is obviously

true).

In particular, an initial segment is  $[0_X, b]$  or  $[0_X, b]$  or all X.