

Finding a Longest Increasing Substring

Example: $X = 1, 3, 1, 8, 2, 4, 9, 2, 10, 3$ (so $x_1 = 1, x_2 = 3$, etc.)

By inspection we see that the longest increasing substring is 2, 4, 9, formed by using x_5, x_6, x_7 .

How can we design an algorithm to solve this problem?