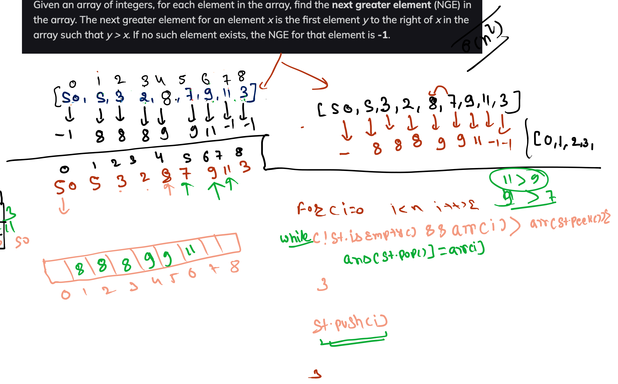
Next Greater Element

Given an array of integers, for each element in the array, find the **next greater element** (NGE) in the array. The next greater element for an element *x* is the first element *y* to the right of *x* in the array such that *y* > *x*. If no such element exists, the NGE for that element is **-1**.



The stock span problem is a financial problem where we have a series of N daily price quotes for a stock and we need to calculate span of stock's price for all N days. You are given an array of length N, where i^{th} element of array denotes the price of a stock on i^{th}. Find the span of stock's price on i^{th} day, for every 1<=i<=N.
A span of a stock's price on a given day, i, is the maximum number of consecutive days before the $(i+1)^{th}$ day, for which stock's price on these days is less than or equal to that on the i^{th} day.