WRITE UP

Longest Increasing Subsequence

○ Initialised two arrays l1 and l2 with default values

○ Iterates through the input array to compute the length of the LIS ending at each position and the previous index in that LIS.

○ The maximum length of the LIS and its ending index are then determined.

○ Finally, the LIS is reconstructed by traversing the l2 array starting at the ending index and adding each corresponding value from the input array to a list, which is then returned.