Project Name: LIS (Longest Increasing Subsequence)

Project Description:

The Longest Increasing Subsequence (LIS) problem is to find the length of the

longest subsequence of a given sequence such that all elements of the

subsequence are sorted in increasing order.

To make use of recursive calls, this function must return two things:

1) Length of LIS ending with element arr[n-1]. We use max\_ending\_here for this

purpose

2) Overall maximum as the LIS may end with an element before arr[n-1] max\_ref is used

this purpose.

The value of LIS of full array of size n is stored in max\_ref which is our result