Longest Increasing Subsequences

Source code for Longest Increasing Subsequences

package com.pack1;

public class LongestIncreasingSubsequences

{

public static int LIS(int[] arr, int i, int n, int prev)

{

if (i == n)

{

return 0;

}

int excl = *LIS*(arr, i + 1, n, prev);

int incl = 0;

if (arr[i] > prev)

{

incl = 1 + *LIS*(arr, i + 1, n, arr[i]);

}

return Integer.*max*(incl, excl);

}

public static void main(String[] args)

{

int[] arr = { 20, 512, 758, 270, 131, 16, 60, 25, 75, 85, 105,616,109 };

System.*out*.print("The length of the LIS is " + *LIS*(arr, 0, arr.length, Integer.*MIN\_VALUE*));

}

}