|  |
| --- |
| package com.practiseProject; |
|  |  |
|  | public class LongestIncreasingSubsequence { |
|  |  |
|  | static int max\_start; |
|  |  |
|  | static int lis(int arr[], int a) { |
|  | if (a == 1) |
|  | return 1; |
|  |  |
|  | int res, max\_end = 1; |
|  |  |
|  | for (int i = 1; i < a; i++) { |
|  | res = lis(arr, i); |
|  | if (arr[i - 1] < arr[a - 1] |
|  | && res + 1 > max\_end) |
|  | max\_end = res + 1; |
|  | } |
|  |  |
|  | if (max\_start < max\_end) |
|  | max\_start = max\_end; |
|  |  |
|  | return max\_end; |
|  | } |
|  |  |
|  | static int lis1(int arr[], int n) { |
|  | max\_start = 1; |
|  | lis(arr, n); |
|  | return max\_start; |
|  | } |
|  |  |
|  | public static void main(String args[]) |
|  | { |
|  | int arr[] = { 10, 22, 9, 33, 21, 50, 41, 60 }; |
|  | int n = arr.length; |
|  | System.out.println("Length of lis is " + lis(arr, n) |
|  | + "\n"); |
|  | } |
|  | } |