**Source Code:**

package phase1;

public class LongestIncreasingSubsequence {

static int max;

static int \_lis(int arr[], int n)

{

if (n == 1)

return 1;

int res, max\_ending= 1;

for (int i = 1; i < n; i++) {

res = \_lis(arr, i);

if (arr[i - 1] < arr[n - 1]&& res + 1 > max\_ending)

max\_ending = res + 1;

}

if (max < max\_ending)

max= max\_ending;

return max\_ending;

}

static int lis(int arr[], int n)

{

max= 1;

\_lis(arr, n);

return max;

}

public static void main(String[] args) {

int arr[] = { 10, 22, 3, 37, 25, 41, 59, 66};

int n = arr.length;

System.out.println("Length of lis is " + lis(arr, n)+ "\n");

}

}