Session-4

Project: Longest increasing subsequence

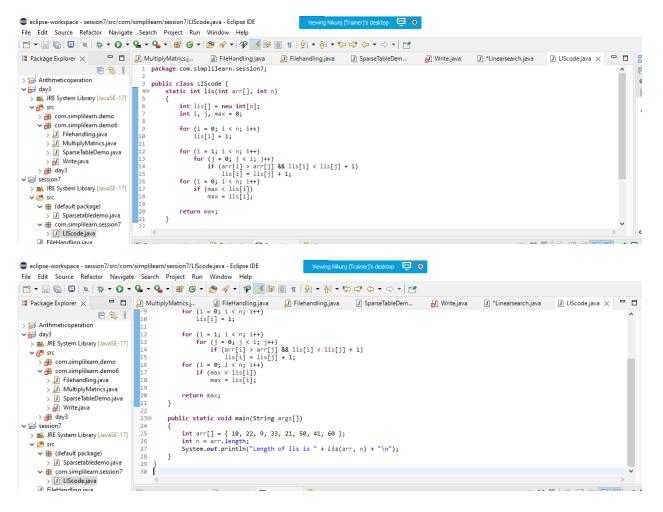
Project objective: As developer, Write program to find the longest increasing sunsequence.

Background of the problem statement:

As developer, Write a java code to find the longest increasing sunsequence from a list of random numbers.

Sourcecode:

```
package com.simplilearn.session7;
public class LIScode {
      static int lis(int arr[], int n)
        int lis[] = new int[n];
        int i, j, max = 0;
        for (i = 0; i < n; i++)</pre>
            lis[i] = 1;
        for (i = 1; i < n; i++)
            for (j = 0; j < i; j++)
                if (arr[i] > arr[j] && lis[i] < lis[j] + 1)</pre>
                     lis[i] = lis[j] + 1;
        for (i = 0; i < n; i++)
            if (max < lis[i])</pre>
                max = lis[i];
        return max;
    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");
    }
}
```



Output:

