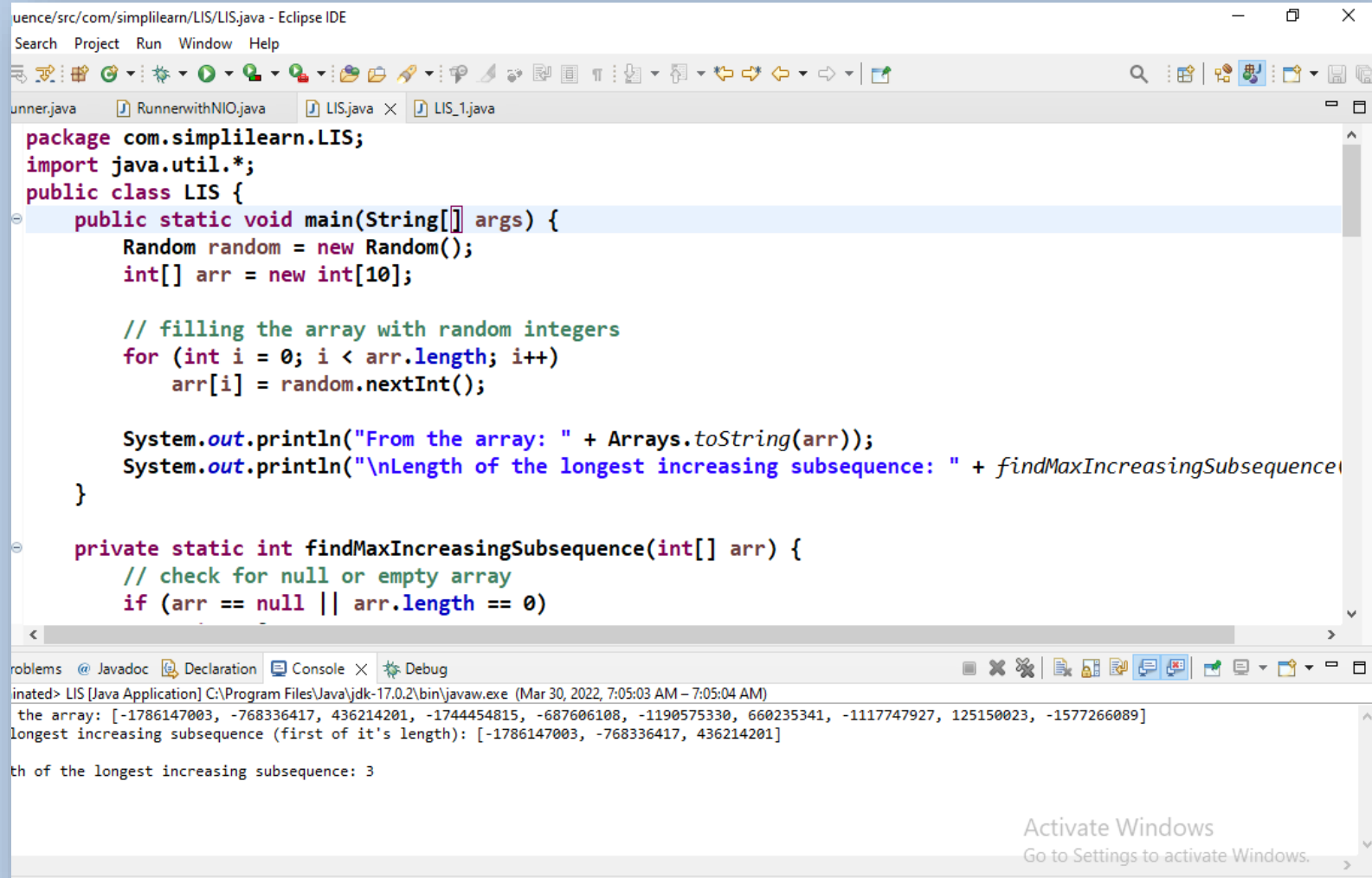


Project Output

LONGEST INCREASING SUBSEQUENCE



The screenshot shows the Eclipse IDE with a Java project named 'com.simplilearn.LIS'. The file 'LIS.java' is open, displaying the following code:

```
package com.simplilearn.LIS;
import java.util.*;
public class LIS {
    public static void main(String[] args) {
        Random random = new Random();
        int[] arr = new int[10];

        // filling the array with random integers
        for (int i = 0; i < arr.length; i++)
            arr[i] = random.nextInt();

        System.out.println("From the array: " + Arrays.toString(arr));
        System.out.println("\nLength of the longest increasing subsequence: " + findMaxIncreasingSubsequence(arr));
    }

    private static int findMaxIncreasingSubsequence(int[] arr) {
        // check for null or empty array
        if (arr == null || arr.length == 0)
            return 0;
    }
}
```

The console output shows the execution results:

```

C:\Program Files\Java\jdk-17.0.2\bin\javaw.exe (Mar 30, 2022, 7:05:03 AM – 7:05:04 AM)
the array: [-1786147003, -768336417, 436214201, -1744454815, -687606108, -1190575330, 660235341, -1117747927, 125150023, -1577266089]
longest increasing subsequence (first of it's length): [-1786147003, -768336417, 436214201]
Length of the longest increasing subsequence: 3

```

An 'Activate Windows' watermark is visible in the bottom right corner of the IDE window.

ing_Subsequence/src/com/simplilearn/LIS/LIS.java - Eclipse IDE

Navigate Search Project Run Window Help

Runner.java RunnerwithNIO.java LIS.java LIS_1.java

```
1 package com.simplilearn.LIS;
2 import java.util.*;
3 public class LIS {
4     public static void main(String[] args) {
5         Random random = new Random();
6         int[] arr = new int[1];
7
8         // filling the array with random integers
9         for (int i = 0; i < arr.length; i++)
10             arr[i] = random.nextInt();
11
12         System.out.println("From the array: " + Arrays.toString(arr));
13         System.out.println("\nLength of the longest increasing subsequence: " + findMaxIncreasingSubsequence(arr));
14     }
15
16     private static int findMaxIncreasingSubsequence(int[] arr) {
17         // check for null or empty array
18         if (arr == null || arr.length == 0)
```

Problems Javadoc Declaration Console Debug

<terminated> LIS [Java Application] C:\Program Files\Java\jdk-17.0.2\bin\javaw.exe (Mar 30, 2022, 7:06:30 AM - 7:06:30 AM)

From the array: [-695846135]
There is only one value in the list!: -695846135

Length of the longest increasing subsequence: 1

Activate Windows

ng_Subsequence/src/com/simplilearn/LIS/LIS.java - Eclipse IDE

Navigate Search Project Run Window Help

Runner.java RunnerwithNIO.java LIS.java X LIS_1.java

```
1 package com.simplilearn.LIS;
2 import java.util.*;
3 public class LIS {
4     public static void main(String[] args) {
5         Random random = new Random();
6         int[] arr = new int[0];
7
8         // filling the array with random integers
9         for (int i = 0; i < arr.length; i++)
10             arr[i] = random.nextInt();
11
12         System.out.println("From the array: " + Arrays.toString(arr));
13         System.out.println("\nLength of the longest increasing subsequence: " + findMaxIncreasingSubsequence(arr));
14     }
15
16     private static int findMaxIncreasingSubsequence(int[] arr) {
17         // check for null or empty array
18         if (arr == null || arr.length == 0)
```

Problems Javadoc Declaration Console X Debug

<terminated> LIS [Java Application] C:\Program Files\Java\jdk-17.0.2\bin\javaw.exe (Mar 30, 2022, 7:06:44 AM – 7:06:45 AM)

From the array: []

Length of the longest increasing subsequence: 0