

Project3.java

```
1 import java.util.*;
2
3
4 /**
5  * The driver program for project2.
6  * This driver reads in a file and hashes them into a table.
7  *
8  * @author Jack Zhan
9  * @version 2016-05-03
10 */
11
12
13 public class Project3 {
14
15     //Storage for the items
16     public static List<String> Items = new ArrayList<String>();
17     private static String lcstring;
18
19     /**
20      * Main entry point for the application.
21      */
22     public static void main (String args[]) {
23
24         Project3      p      = new Project3();
25         LCS           lcs     = new LCS();
26         String        fileName = "input.txt";
27
28         System.out.println("Entered main() method.");
29         p.readInputFile(fileName);
30         for (String key1 : Items)
31         {
32             for (String key2 : Items)
33             {
34                 if (key1 == key2)
35                 {
36                 }
37                 else
38                 {
39                     System.out.println("LCS of " + key1 + " and " + key2 + " is:");
40                     lcstring = lcs.callLCS2(key1, key2);
41                     System.out.println(lcstring);
42                 }
43             }
44         }
45         return;
46     }
47
48     /**
49      * Opens, reads, and closes the file containing items.
50      */
51
52     private void readInputFile(String fileName) {
53
54
55         String line = null;
56
57         System.out.println("Entered readInputFile() method.");
58
59         try {
60             // FileReader reads text files in the default encoding.
```

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```
61     FileReader fileReader = new FileReader(fileName);
62
63     // Always wrap FileReader in BufferedReader.
64     BufferedReader bufferedReader = new BufferedReader(fileReader);
65
66     while((line = bufferedReader.readLine()) != null) {
67         //Resets everything when there is a blank line and
68         //adds the data to array lists
69         if(line.isEmpty() )
70         {
71         }
72         else
73         {
74             //Getting order and setting up the matrixes to be
75             //added into the array list
76             Items.add(line);
77
78         }
79     }
80     // Always close files.
81     bufferedReader.close();
82 }
83 catch(FileNotFoundException ex) {
84     System.out.println(
85         "Unable to open file '" +
86         fileName + "'");
87 }
88 catch(IOException ex) {
89     System.out.println(
90         "Error reading file '"
91         + fileName + "'");
92 }
93 return;
94 }
95
96 }
97
```