```java
import java.util.*;

/**
 *  The driver program for project1.
 *  This driver reads in a file with matrixes with their order and then multiplies them.
 *
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 *  @version 2016-02-20
 */


public class Project1 {

        //Storage for the Order of the Matrix
        public static List<Integer> LOrder = new ArrayList<Integer>();
        //Storage for the the Matrixes to be multiplied
        public static List<int[][]> LMatrix1 = new ArrayList<int[][]>();
        public static List<int[][]> LMatrix2 = new ArrayList<int[][]>();

        /**
         *  Main entry point for the application.
         */
        public static void main (String args[]) {

            Project1          p        = new Project1();
            MatrixMultiplier  mm       = new MatrixMultiplier();
            String            fileName = "input.txt";

            System.out.println("Entered main() method.");
            p.readInputFile(fileName);
            mm.solve(p.LOrder,p.LMatrix1,p.LMatrix2);
            return;
        }

        /**
         *  Opens, reads, and closes the file containing matrixes.
        */

    private void readInputFile(String fileName) {

        int order = 0;
        int[][] matrix1 = null;
        int[][] matrix2 = null;
        String line = null;
        int flag  = 1;
        int flag2 = 0;
        int counter = 0;
        boolean Mswitch = true;

        System.out.println("Entered readInputFile() method.");

        try {
            // FileReader reads text files in the default encoding.
            FileReader fileReader = new FileReader(fileName);

            // Always wrap FileReader in BufferedReader.
            BufferedReader bufferedReader = new BufferedReader(fileReader);

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60              while((line = bufferedReader.readLine()) != null) {
61                  //Resets everything when there is a blank line and
62                  //adds the data to array lists
63                  if(line.isEmpty() || line.trim().equals("") ||
  line.trim().equals("\n")){
64                      flag  = 0;
65                      flag2 = 0;
66                      Mswitch = true;
67                      LOrder.add(order);
68                      LMatrix1.add(matrix1);
69                      LMatrix2.add(matrix2);
70                  }
71                  if (flag==0) {
72
73                  } else if(flag==1){
74                      //Getting order and setting up the matrixes to be
75                      //added into the array list
76                      order = Integer.parseInt(line);
77                      matrix1 = new int[order][order];
78                      matrix2 = new int[order][order];
79                  } else {
80                      //Mswitch switches between Matrix1 and Matrix2
81                      if (flag2 == order){
82                          Mswitch = false;
83                          flag2 = 0;
84                      }
85                      counter = 0;
86                      if(Mswitch){
87                          //Read in the data for the matrix
88                          for(String temp : line.split("\\s")){
89                              matrix1[flag2][counter] = Integer.parseInt(temp);
90                              counter += 1;
91                          }
92                      } else {
93                          for(String temp : line.split("\\s")){
94                              matrix2[flag2][counter] = Integer.parseInt(temp);
95                              counter += 1;
96                          }
97                      }
98                      flag2 += 1;
99                  }
100                 flag += 1;
101             }
102             LOrder.add(order);
103             LMatrix1.add(matrix1);
104             LMatrix2.add(matrix2);
105
106             // Always close files.
107             bufferedReader.close();
108         }
109         catch(FileNotFoundException ex) {
110             System.out.println(
111                 "Unable to open file '" +
112                 fileName + "'");
113         }
114         catch(IOException ex) {
115             System.out.println(
116                 "Error reading file '"
117                 + fileName + "'");
```

```
118         }
119         return;
120     }
121
122 }
123
```