```java
// Andrew Sheinberg

import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JButton;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.util.ArrayList;
import javax.swing.JTextField;
import javax.swing.JLabel;
import java.awt.Font;

public class KyrptoGUI {

    private JFrame frame;
    private JTextField target;
    private JTextField Card2;
    private JTextField Card3;
    private JTextField Card1;
    private JTextField Card4;
    private JTextField Card5;
    private JTextField answer;

    public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    KyrptoGUI window = new KyrptoGUI();
                    window.frame.setVisible(true);
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        });
    }

    public KyrptoGUI() {
        initialize();
    }
    private void initialize() {
        frame = new JFrame();
        frame.setBounds(100, 100, 450, 300);
```

```
43          frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
44          frame.getContentPane().setLayout(null);
45
46          JButton solveButton = new JButton("Solve");
47          solveButton.addActionListener(new ActionListener() {
48              public void actionPerformed(ActionEvent arg0) {
49                  int one, two, three, four, five, t;
50                  one = Integer.parseInt(Card1.getText());
51                  two = Integer.parseInt(Card2.getText());
52                  three = Integer.parseInt(Card3.getText());
53                  four = Integer.parseInt(Card4.getText());
54                  five = Integer.parseInt(Card5.getText());
55                  t = Integer.parseInt(target.getText());
56                  ArrayList<Integer> numberOrder =
    Krypto_Solver.findOrder(one,two,three,four,five,t);
57                  int i1=0, i2=0, i3=0, i4=0, i5=0;
58                  i1=numberOrder.get(0);
59                  i2=numberOrder.get(1);
60                  i3=numberOrder.get(2);
61                  i4=numberOrder.get(3);
62                  i5=numberOrder.get(4);
63                  ArrayList<Integer> operationOrder =
    Krypto_Solver.findOperations(i1,i2,i3,i4,i5,t);
64                  ArrayList<String> stringOperations;
65                  stringOperations = new ArrayList<String>();
66                  String [] operations = {"+", "-", "*", "/"};
67                   if (numberOrder.size()>0 && operationOrder.size()>0)
    {
68                      for (int i=0;i<4;i++){
69
    stringOperations.add(operations[operationOrder.get(i)]);
70                      }
71                      answer.setText((numberOrder.get(0) +
    stringOperations.get(0) + numberOrder.get(1) +
    stringOperations.get(1) + numberOrder.get(2) +
    stringOperations.get(2) + numberOrder.get(3) +
    stringOperations.get(3) + numberOrder.get(4)));
72                  }
73                  else
74                      answer.setText("No solution is possible");
75              }
76          });
```

```
77          solveButton.setBounds(276, 98, 117, 29);
78          frame.getContentPane().add(solveButton);
79
80          JLabel lblEnterYourKrypto = new JLabel("Enter Your Five
    Krypto Numbers Below");
81          lblEnterYourKrypto.setBounds(16, 43, 255, 16);
82          frame.getContentPane().add(lblEnterYourKrypto);
83
84          JLabel lblEnterYourTarget = new JLabel("Enter Your Target
    Krypto Number");
85          lblEnterYourTarget.setBounds(37, 111, 214, 16);
86          frame.getContentPane().add(lblEnterYourTarget);
87
88          target = new JTextField();
89          target.setBounds(75, 139, 134, 28);
90          frame.getContentPane().add(target);
91          target.setColumns(10);
92
93          Card2 = new JTextField();
94          Card2.setBounds(79, 71, 31, 28);
95          frame.getContentPane().add(Card2);
96          Card2.setColumns(10);
97
98          Card3 = new JTextField();
99          Card3.setColumns(10);
100         Card3.setBounds(122, 71, 31, 28);
101         frame.getContentPane().add(Card3);
102
103         Card1 = new JTextField();
104         Card1.setColumns(10);
105         Card1.setBounds(37, 71, 31, 28);
106         frame.getContentPane().add(Card1);
107
108         Card4 = new JTextField();
109         Card4.setColumns(10);
110         Card4.setBounds(166, 71, 31, 28);
111         frame.getContentPane().add(Card4);
112
113         Card5 = new JTextField();
114         Card5.setColumns(10);
115         Card5.setBounds(209, 71, 31, 28);
116         frame.getContentPane().add(Card5);
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117
118         answer = new JTextField();
119         answer.setBounds(153, 220, 134, 28);
120         frame.getContentPane().add(answer);
121         answer.setColumns(10);
122
123         JLabel lblTheCombinationIs = new JLabel("The Combination
    Is:");
124         lblTheCombinationIs.setBounds(153, 192, 134, 16);
125         frame.getContentPane().add(lblTheCombinationIs);
126
127         JLabel lblCreatedByAndrew = new JLabel("Created By Andrew
    Sheinberg");
128         lblCreatedByAndrew.setBounds(237, 256, 207, 16);
129         frame.getContentPane().add(lblCreatedByAndrew);
130
131         JLabel lblKyptoSolver = new JLabel("Kypto Solver");
132         lblKyptoSolver.setFont(new Font("Lucida Grande", Font.BOLD,
    14));
133         lblKyptoSolver.setBounds(177, 15, 94, 16);
134         frame.getContentPane().add(lblKyptoSolver);
135     }
136 }
```