

```
1:  /*
2:
3:  Jared Dyreson
4:  CWID: 889546529
5:  Checker.java ->  Move that kitty all over the board
6:
7:  */
8:
9:  import java.awt.*;
10: import javax.swing.*;
11: import java.awt.Color;
12: import javax.swing.JFrame;
13: import java.awt.event.*;
14: import java.text.MessageFormat;
15:
16: // NOTE: PDF rendered does not contain screenshots of code
17: // these are PDFs created automatically via enscript
18: // script is included
19:
20: public class Checker extends JFrame implements ActionListener{
21:
22:     private final int ROWS = 8, COLS = 8, FRAME_HEIGHT = 500, FRAME_WIDTH = 500;
23:     private JPanel pane = new JPanel(new GridLayout(ROWS, COLS, 2, 2));
24:     private JPanel[][] tpanel = new JPanel[8][8];
25:
26:     // colors to make the checker board
27:     private Color c1 = Color.WHITE;
28:     private Color c2 = Color.CYAN;
29:     private Color tmp;
30:
31:     // movement buttons
32:     private JButton up = new JButton("UP");
33:     private JButton down = new JButton("DOWN");
34:     private JButton left = new JButton("LEFT");
35:     private JButton right = new JButton("RIGHT");
36:
37:     // cat object
38:     private Kitty cat = new Kitty();
39:     // how we represent the cat in the checker board
40:     private JLabel face_label = new JLabel(cat.get_face());
41:
42:     public Checker(){
43:         super("Run Kitty Run");
44:         this.setLayout(new BorderLayout());
45:         this.setSize(FRAME_HEIGHT, FRAME_WIDTH);
46:         this.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
47:
48:         up.addActionListener(this);
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49:         down.addActionListener(this);
50:         left.addActionListener(this);
51:         right.addActionListener(this);
52:
53:         this.add(up, BorderLayout.NORTH);
54:         this.add(down, BorderLayout.SOUTH);
55:         this.add(left, BorderLayout.WEST);
56:         this.add(right, BorderLayout.EAST);
57:         this.add(pane, BorderLayout.CENTER);
58:
59:         // making the checker board using a nest for loop
60:
61:         for(int x = 0; x < COLS; ++x){
62:             // x -> COLUMNS
63:             for(int y = 0; y < ROWS; ++y){
64:                 // y -> ROWS
65:                 tpanel[x][y] = new JPanel();
66:                 pane.add(tpanel[x][y]);
67:                 // this makes the alternating cyan, white appearance
68:                 if(x % ROWS == 0){
69:                     // swap the colors
70:                     tmp = c1;
71:                     c1 = c2;
72:                     c2 = tmp;
73:                 }
74:                 else{
75:                     tmp = c2;
76:                     c2 = c1;
77:                     c1 = tmp;
78:                 }
79:                 // if even index, set it to the first color, else the second
80:                 if(x % 2 == 0){ tpanel[x][y].setBackground(c1); }
81:                 else{ tpanel[x][y].setBackground(c2); }
82:             }
83:         }
84:         // place the cat in the middle of the checker board
85:         this.set_kitty(4, 4);
86:         //tpanel[0][0].add(face_label);
87:     }
88:
89:     public void set_kitty(int x, int y) throws IndexOutOfBoundsException{
90:         // since our arrays start at 0, we appear to be one off but in reality we are not
91:
92:         // original coordinates
93:         int x_naught = cat.get_x();
94:         int y_naught = cat.get_y();
95:
96:
```

```
97:         // place the cat
98:         tpanel[y][x].add(face_label);
99:
100:        cat.set_position(x, y);
101:
102:        // getting the string representation of the coordinates for the cat
103:        String x_s = String.valueOf(cat.get_x());
104:        String y_s = String.valueOf(cat.get_y());
105:        String coordinate_message = MessageFormat.format("{0}, {1}", x_s, y_s);
106:
107:        // get the original place where the cat was and clean up
108:        tpanel[x_naught][y_naught].removeAll();
109:        // these methods reload the JPanel object
110:        pane.revalidate();
111:        pane.repaint();
112:
113:        // update the positions of the cat
114:        // show where the cat is
115:        System.out.println(coordinate_message);
116:
117:    }
118:    @Override
119:    public void actionPerformed(ActionEvent event){
120:
121:        Object source = event.getSource();
122:        int x = this.cat.get_x();
123:        int y = this.cat.get_y();
124:
125:        // -/+ are switched because of our frame of reference
126:
127:        if(source == up){
128:            try{
129:                this.set_kitty(x, y-1);
130:                //this.set_kitty(this.cat.get_x()-1, this.cat.get_y()+1);
131:                // ^ makes the cat go diagonal on the same color
132:                // like a bishop on a chess board
133:                //this.set_kitty(this.cat.get_y(), this.cat.get_x()-1);
134:                // apparently this code ^ makes the cat move diagonally
135:            }
136:            // these try catch blocks are a cheeky work around for hitting the edge of the board
137:            catch(Exception error){}
138:        }
139:        else if(source == down){
140:            try{
141:                this.set_kitty(x, y+1);
142:            }
143:            catch(Exception error){}
144:        }
```

```
145:         else if(source == left){
146:             try{
147:                 this.set_kitty(x-1, y);
148:             }
149:             catch(Exception error){}
150:         }
151:         else if(source == right){
152:             try{
153:                 this.set_kitty(x+1, y);
154:             }
155:             catch(Exception error){}
156:         }
157:     }
158:     public static void main(String[] args){
159:         // Auto generated with caffine and lightdm.service
160:         Checker c = new Checker();
161:         c.setVisible(true);
162:     }
163: }
```

```
1: public class Kitty{
2:
3:     private String face = "^.^=";
4:     private int X = 0, Y = 0;
5:
6:     public void set_position(int x, int y){
7:         this.X = x;
8:         this.Y = y;
9:     }
10:
11:     public int get_x(){ return X; }
12:     public int get_y(){ return Y; }
13:     public String get_face(){ return face; }
14:
15:     public boolean is_at(int x, int y){
16:         return ((this.X == x) && (this.Y == y)) ? true : false;
17:     }
18: }
```

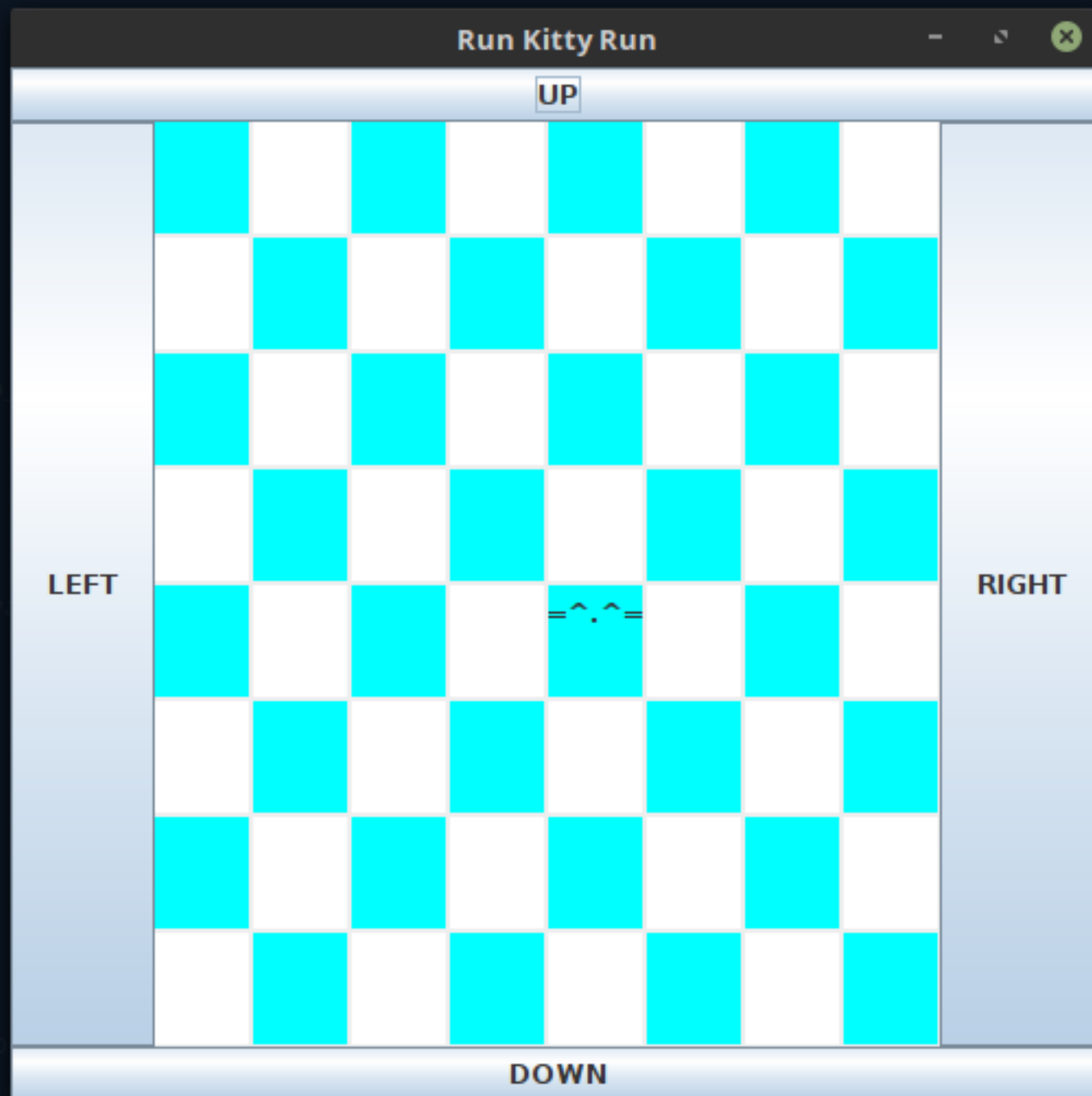
```
1: #!/usr/bin/env zsh
2:
3: # support for Java, CPP, C, zsh/sh/bash, Python
4: # more will be added when I use more file types
5:
6: function find_extension(){
7:     header="$(head -n1 "$1")"
8:     [[ "$(grep "env" "$1")" ]] && file_extension="$(echo "$header" | awk '{print $2}')"
9:     [[ "$(grep "\#\!\!/bin" "$1")" ]] && file_extension="$(basename "$1")"
10:    [[ "$file_extension" == "zsh" ]] && file_extension="bash"
11: }
12:
13: [[ ! -d csrf_exported ]] && mkdir csrf_exported
14:
15: for file in "$@"; do
16:     filename="$file:t:r"
17:     file_extension="$file:t:e"
18:     [[ -z "$file_extension" ]] && find_extension "$file"
19:     [[ "$file_extension" == "py" ]] && file_extension="python"
20:
21:
22:     enscript -rG --word-wrap --line-numbers -p - --highlight="$file_extension" --color=1 -c "$file" \
23:     | ps2pdf - csrf_exported/"$filename".pdf
24: done
25:
```

```
Checker.java:20: warning: [serial] serializable class Checker has no definition of serialVersionUID
public class Checker extends JFrame implements ActionListener{
      ^
```

1 warning

4, 4

□



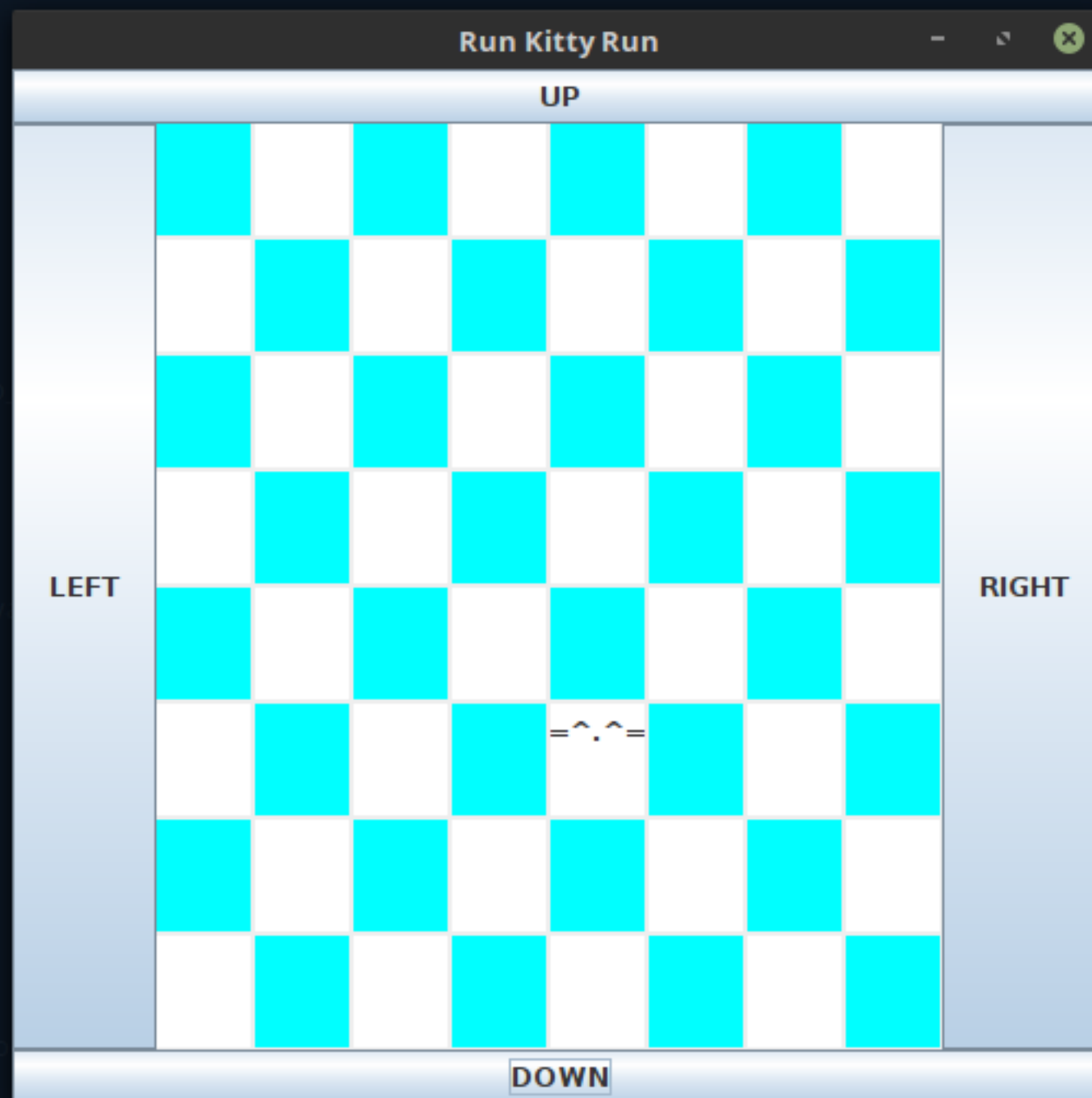
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```
1 warning
```

```
4, 4
```

```
4, 5
```

```
□
```




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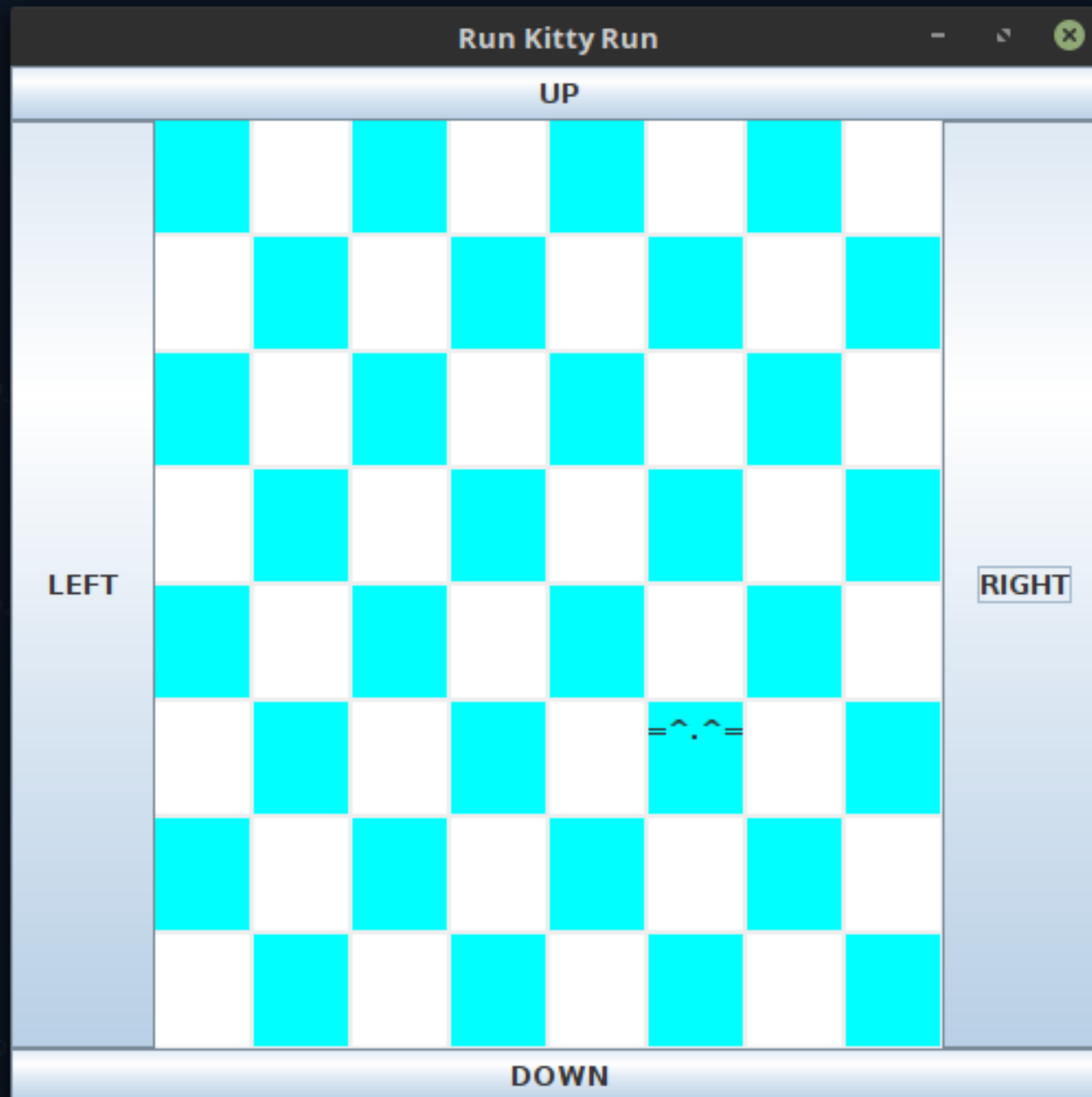
```
1 warning
```

```
4, 4
```

```
4, 5
```

```
5, 5
```

```
□
```



```
Checker.java:20: warning: [serial] serializable class Checker has no definition of serialVersionUID
```

```
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```

```
1 warning
```

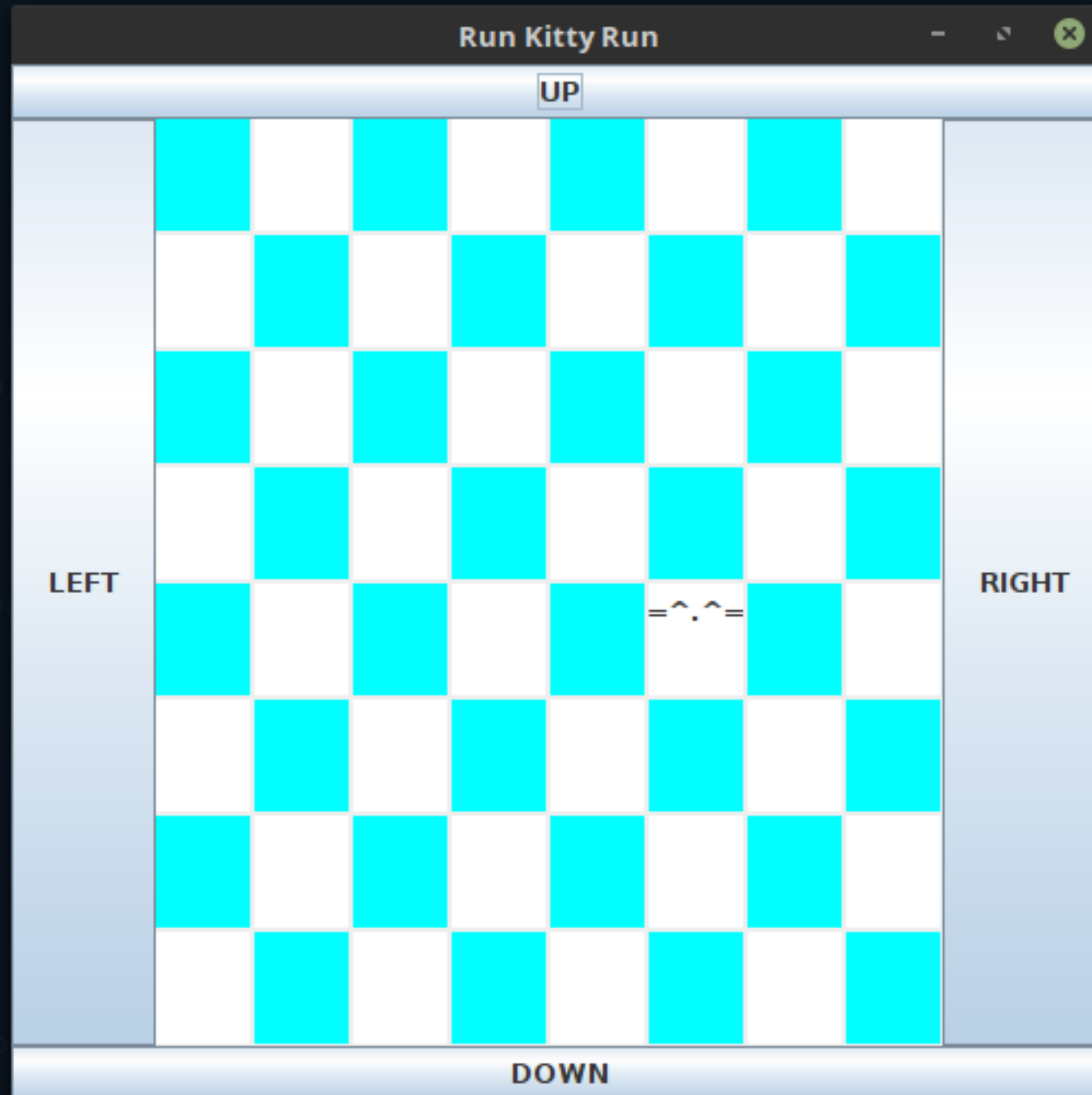
```
4, 4
```

```
4, 5
```

```
5, 5
```

```
5, 4
```

```
□
```



```
Checker.java:20: warning: [serial] serializable class Checker has no definition of serialVersionUID
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```

```
1 warning
```

```
4, 4
4, 5
5, 5
5, 4
```

```
4, 4
```

```
[]
```

