

```
1 using System;
2 using System.Windows.Forms;
3
4 namespace Karela
5 {
6     public partial class Lesson : Form
7     {
8         int lessonNumber = 1; //Current lesson displayed
9         string lesson = Prototype.Properties.Resources.Lessons; //Lessons from text file
10        string[] lessons; //Stores separate lesson
11        string[] lessonTitle = new string[8]; //Stores lesson titles
12        string[] lessonText = new string[8]; //Stores lesson texts
13        string[] lessonProg = new string[8]; //Stores lesson programs
14
15        private main mainForm;
16        public Lesson(main mf, int lessonNum)
17        {
18            InitializeComponent();
19            lessons = lesson.Split('%'); //Split lesson
20            int c = 0; //Current lesson to place in arrays
21            for(int i = 0; i < lessons.Length; i = i+3) //Iterate through lessons to get title, text and prog
22            {
23
24                lessonTitle[c] = lessons[i];
25                lessonText[c] = lessons[i + 1];
26                lessonProg[c] = lessons[i + 2].ToLower();
27                c++;
28            }
29
30            this.mainForm = mf;
31            lessonNumber = lessonNum; //Setting lesson number from main form
32            labelLTitle.Text = lessonTitle[lessonNumber];
33            labelLProg.Text = lessonProg[lessonNumber];
34            labelLText.Text = lessonText[lessonNumber];
35
36        }
37
38        //*****
39        // Running the lesson program
40        //*****
41        private void button1Run_Click(object sender, EventArgs e)
```

```
42     {
43         //Disable buttons
44         buttonLRun.Enabled = false;
45         buttonLReset.Enabled = false;
46         buttonLStep.Enabled = false;
47
48         //Set variables in main form
49         mainForm.progSet = true;
50         mainForm.fromLesson = true;
51         mainForm.prog = labelLProg.Text.Split('\n');
52
53         //Call run from main form
54         mainForm.buttonRun_Click(sender, e);
55
56         //Enable buttons
57         buttonLRun.Enabled = true;
58         buttonLReset.Enabled = true;
59         buttonLStep.Enabled = true;
60     }
61
62     private void buttonLStep_Click(object sender, EventArgs e)
63     {
64         //Disable buttons
65         buttonLRun.Enabled = false;
66         buttonLReset.Enabled = false;
67         buttonLStep.Enabled = false;
68
69         //Set variables in main form
70         mainForm.fromLesson = true;
71         mainForm.progSet = true;
72         mainForm.prog = labelLProg.Text.Split('\n');
73
74         //Call step from main form
75         mainForm.buttonStep_Click(sender, e);
76
77         //Enable buttons
78         buttonLRun.Enabled = true;
79         buttonLReset.Enabled = true;
80         buttonLStep.Enabled = true;
81     }
82 }
```

```
83
84     private void buttonlReset_Click(object sender, EventArgs e)
85     {
86         //Disable buttons
87         buttonLRun.Enabled = false;
88         buttonlReset.Enabled = false;
89         buttonlStep.Enabled = false;
90
91         //Call reset from main form
92         mainForm.buttonReset_Click(sender, e);
93
94         //Enable buttons
95         buttonLRun.Enabled = true;
96         buttonlReset.Enabled = true;
97         buttonlStep.Enabled = true;
98     }
99
100
101     //*****
102     // Enabling and disabling buttons on focus change
103     //*****
104     private void lesson_Activate(object sender, EventArgs e)
105     {
106         buttonLRun.Enabled = true;
107         buttonlReset.Enabled = true;
108         buttonlStep.Enabled = true;
109         mainForm.fromLesson = true;
110
111     }
112
113     private void lesson_Deactivate(object sender, EventArgs e)
114     {
115         buttonLRun.Enabled = false;
116         buttonlReset.Enabled = false;
117         buttonlStep.Enabled = false;
118
119     }
120
121
122     //*****
123     // Traversing lessons
```

```
124 //*****
125 private void buttonNext_Click(object sender, EventArgs e)
126 {
127     lessonNumber = lessonNumber+1; //Increase lesson number
128     if (lessonNumber < 8) //Change lesson displayed if not out of range
129     {
130         labelLTitle.Text = lessonTitle[lessonNumber];
131         labelLProg.Text = lessonProg[lessonNumber];
132         labelLText.Text = lessonText[lessonNumber];
133     }
134     else //Reset to the first lesson
135     {
136         lessonNumber = 0;
137         labelLTitle.Text = lessonTitle[lessonNumber];
138         labelLProg.Text = lessonProg[lessonNumber];
139         labelLText.Text = lessonText[lessonNumber];
140     }
141 }
142
143 private void buttonPrev_Click(object sender, EventArgs e)
144 {
145     if (lessonNumber-- > 0) //Change lesson displayed if not out of range
146     {
147         lessonNumber = lessonNumber--;
148         labelLTitle.Text = lessonTitle[lessonNumber];
149         labelLProg.Text = lessonProg[lessonNumber];
150         labelLText.Text = lessonText[lessonNumber];
151     }
152     else //Reset to the last lesson
153     {
154         lessonNumber = 7;
155         labelLTitle.Text = lessonTitle[lessonNumber];
156         labelLProg.Text = lessonProg[lessonNumber];
157         labelLText.Text = lessonText[lessonNumber];
158     }
159 }
160 }
161 }
162 }
```