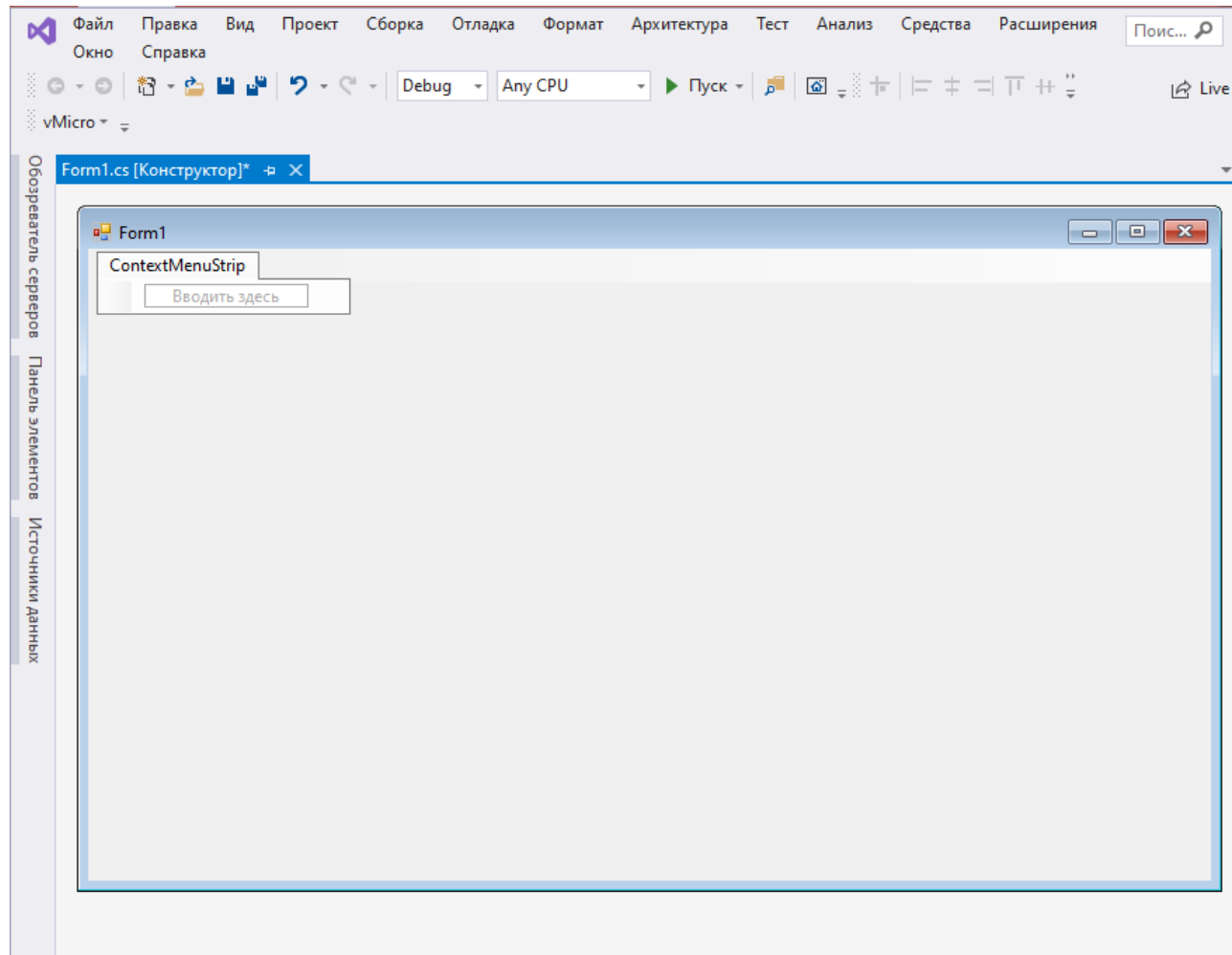




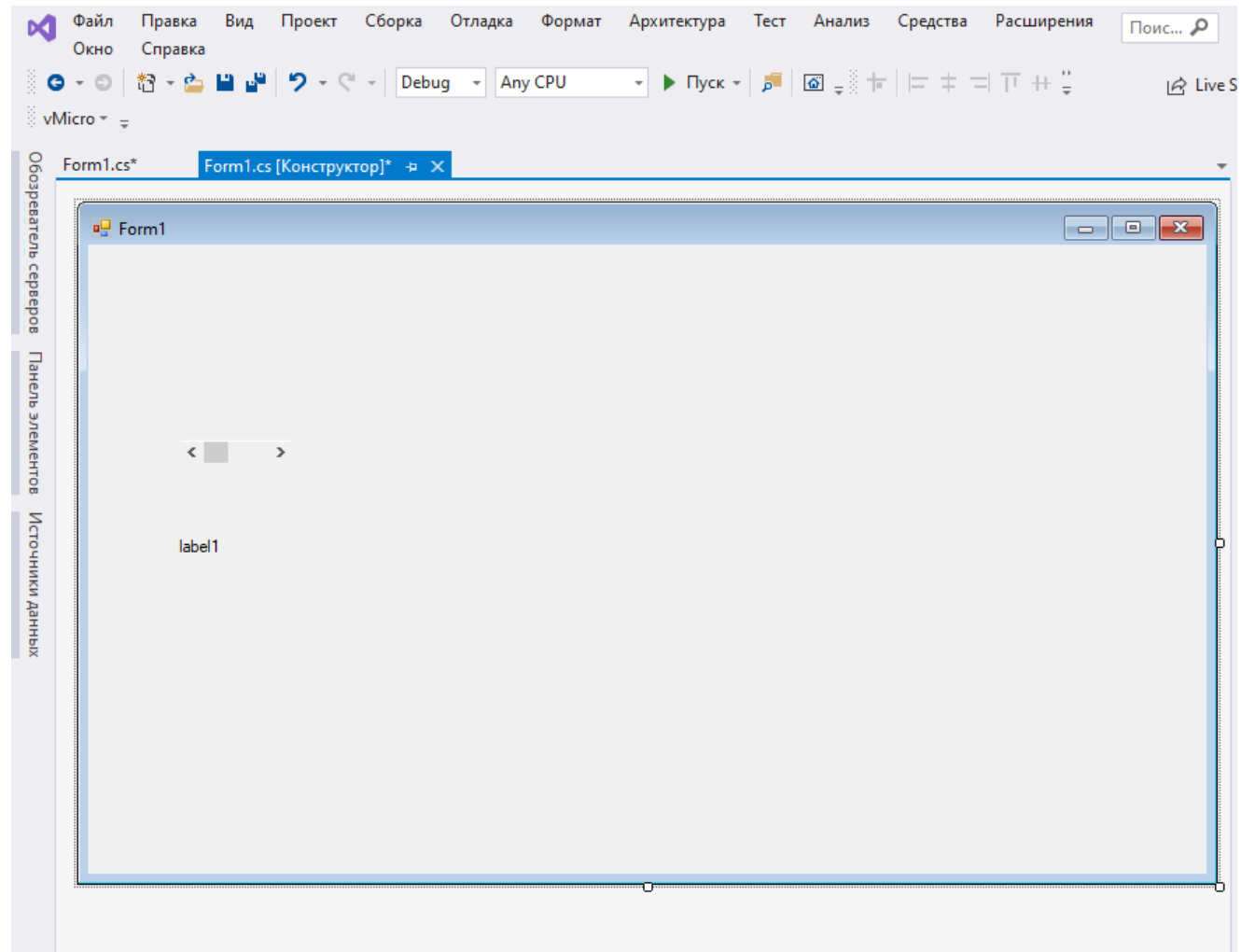
THE LECTURE 10

PAINT APPLICATION

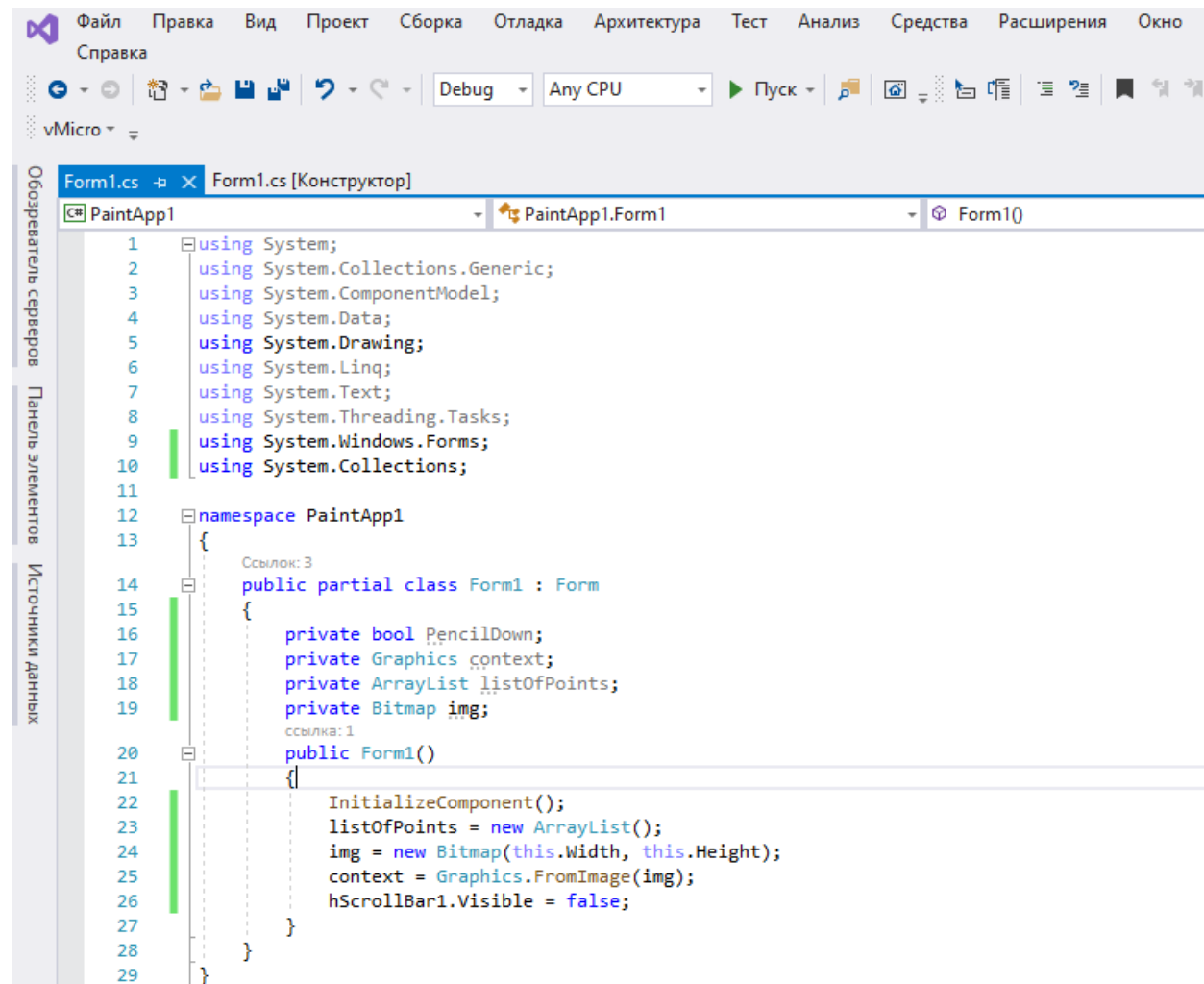
CONTEXT MENU STRIP



ADDING LABEL AND SCROLL BAR



ADDING DRAWING



ADDING METHODS OF ELEMENTS

```
Form1.cs [Конструктор]
PaintApp1 PaintApp1.Form1
16 private bool pencilDown;
17 private Graphics context;
18 private ArrayList listOfPoints;
19 private Bitmap img;
20 ссылка: 1
21 public Form1()
22 {
23     InitializeComponent();
24     listOfPoints = new ArrayList();
25     img = new Bitmap(this.Width, this.Height);
26     context = Graphics.FromImage(img);
27     hScrollBar1.Visible = false;
28 }
29 ссылка: 1
30 private void changeColorToolStripMenuItem_Click(object sender, EventArgs e)
31 {
32     ColorDialog dlg = new ColorDialog();
33     if (dlg.ShowDialog() == DialogResult.OK)
34         this.ForeColor = dlg.Color;
35 }
36 ссылка: 1
37 private void thicknessToolStripMenuItem_Click(object sender, EventArgs e)
38 {
39     hScrollBar1.Visible = true;
40 }
41 ссылка: 1
42 private void Save(Control c, string file)
43 {
44     Graphics g = c.CreateGraphics();
45     Bitmap picture = new Bitmap(c.Width, c.Height);
46     c.DrawToBitmap(picture, new Rectangle(c.ClientRectangle.X, c.ClientRectangle.Y, c.Width, c.Height));
47     picture.Save(file);
48     picture.Dispose();
49 }
50 ссылка: 1
51 private void saveToolStripMenuItem_Click(object sender, EventArgs e)
52 {
53     Save(this, "picture.jpg");
54     MessageBox.Show("Image was saved");
55 }
56 }
```

ADDING MOUSEUP AND MOUSEMOVE METHODS

```
Form1.cs [Конструктор]
PaintApp1
PaintApp1.Form1

54 }
55
56 ссылка: 1
57 private void Form1_MouseUp(object sender, MouseEventArgs e)
58 {
59     if(e.Button == MouseButtons.Left)
60     {
61         Point p = new Point(-1, -1);
62         listOfPoints.Add(p);
63         PencilDown = false;
64         label1.Text = "MouseUp";
65         Invalidate();
66     }
67
68 ссылка: 1
69 private void Form1_MouseMove(object sender, MouseEventArgs e)
70 {
71     Point p = new Point(e.X, e.Y);
72     listOfPoints.Add(p);
73     Pen paint_brush = new Pen(this.ForeColor);
74     paint_brush.Width = hScrollBar1.Value;
75     if(PencilDown == true)
76     {
77         context.DrawLine(paint_brush, (Point)listOfPoints[listOfPoints.Count - 2], (Point)listOfPoints[listOfPoints.Count - 1]);
78         label1.Text = "MouseMove";
79         Invalidate();
80     }
81
82 ссылка: 0
83 protected override void OnPaint(PaintEventArgs e)
84 {
85     base.OnPaint(e);
86     e.Graphics.DrawImage(img, 0, 0);
87 }
88
89 }
```

ADDING MOUSEDOWN METHOD

ссылка: 1

```
private void Form1_MouseMove(object sender, MouseEventArgs e)
{
    Point p = new Point(e.X, e.Y);
    listOfPoints.Add(p);
    Pen paint_brush = new Pen(this.ForeColor);
    paint_brush.Width = hScrollBar1.Value;
    if(PencilDown == true)
    {
        context.DrawLine(paint_brush, (Point)listOfPoints[listOfPoints.Count - 2], (Point)listOfPoints[listOfPoints.Count - 1]);
        label1.Text = "MouseMove";
        Invalidate();
    }
}
```

Ссылка: 0

```
protected override void OnPaint(PaintEventArgs e)
{
    base.OnPaint(e);
    e.Graphics.DrawImage(img, 0, 0);
}
```

ссылка: 1

```
private void Form1_MouseDown(object sender, MouseEventArgs e)
{
    if(e.Button == MouseButtons.Left)
    {
        PencilDown = true;
        Point p = new Point(e.X, e.Y);
        listOfPoints.Add(p);
        label1.Text = "MouseDown";
        Invalidate();
    }
}
```

RUNNING THE PROGRAM

