THE LECTURE 10
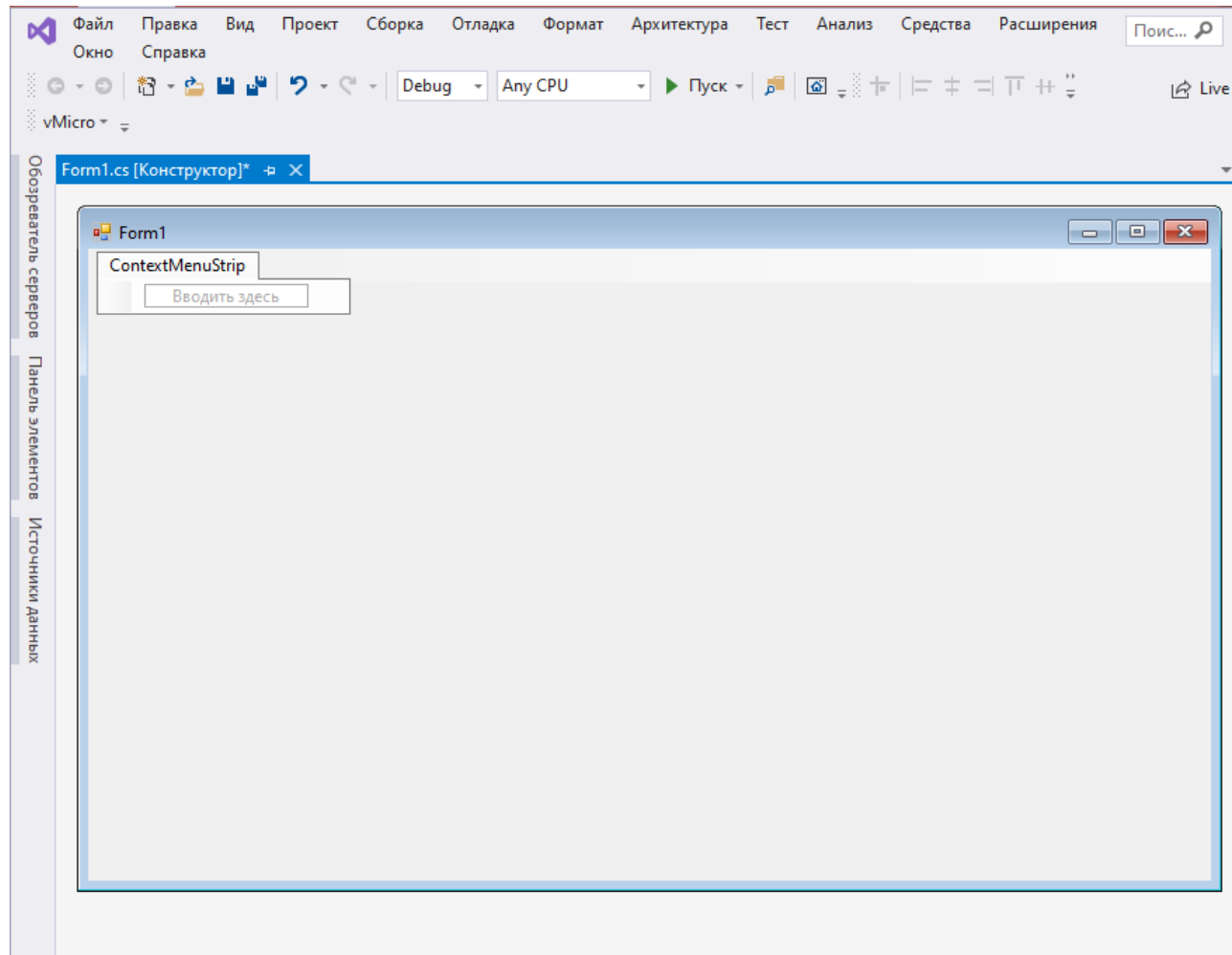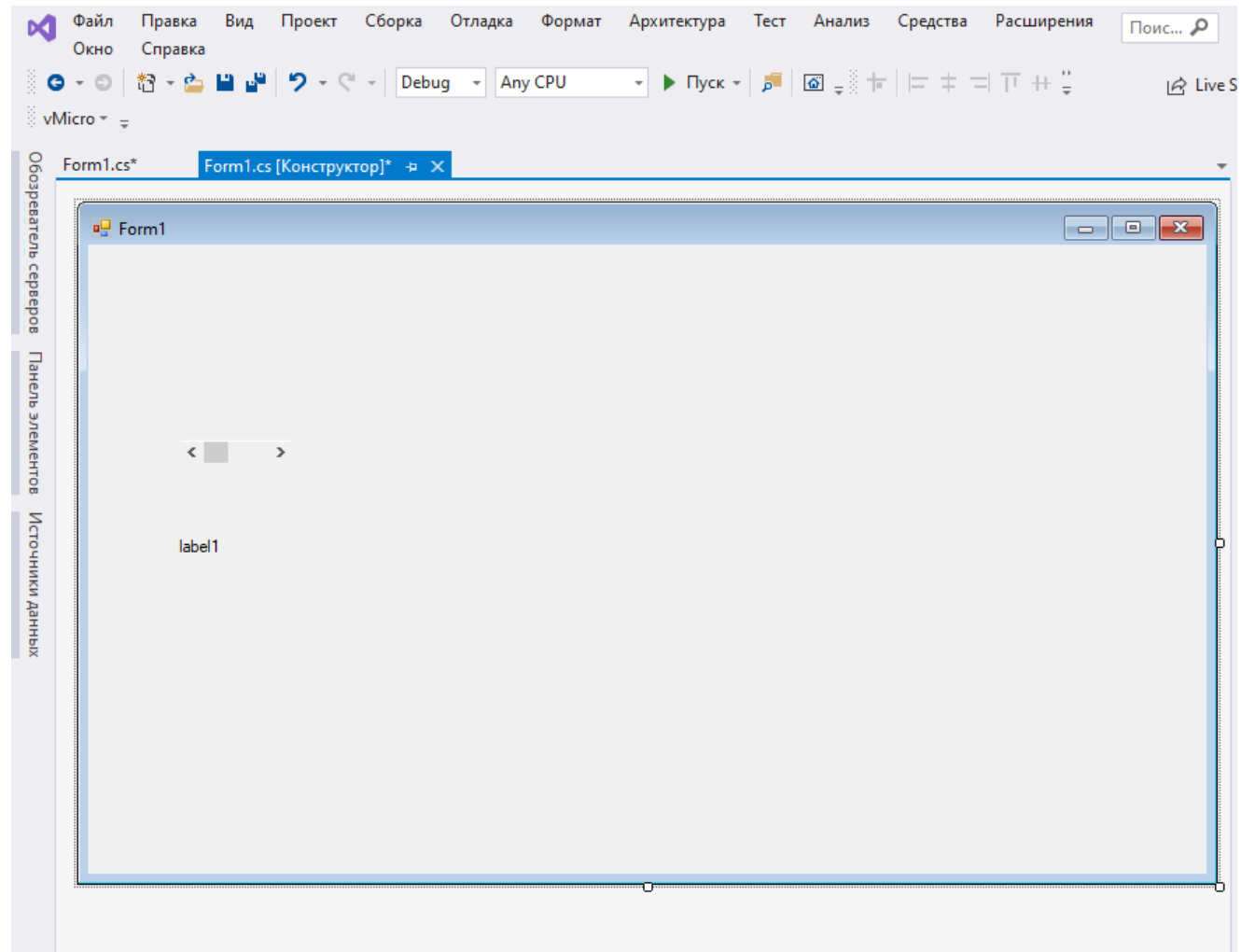
PAINT APPLICATION
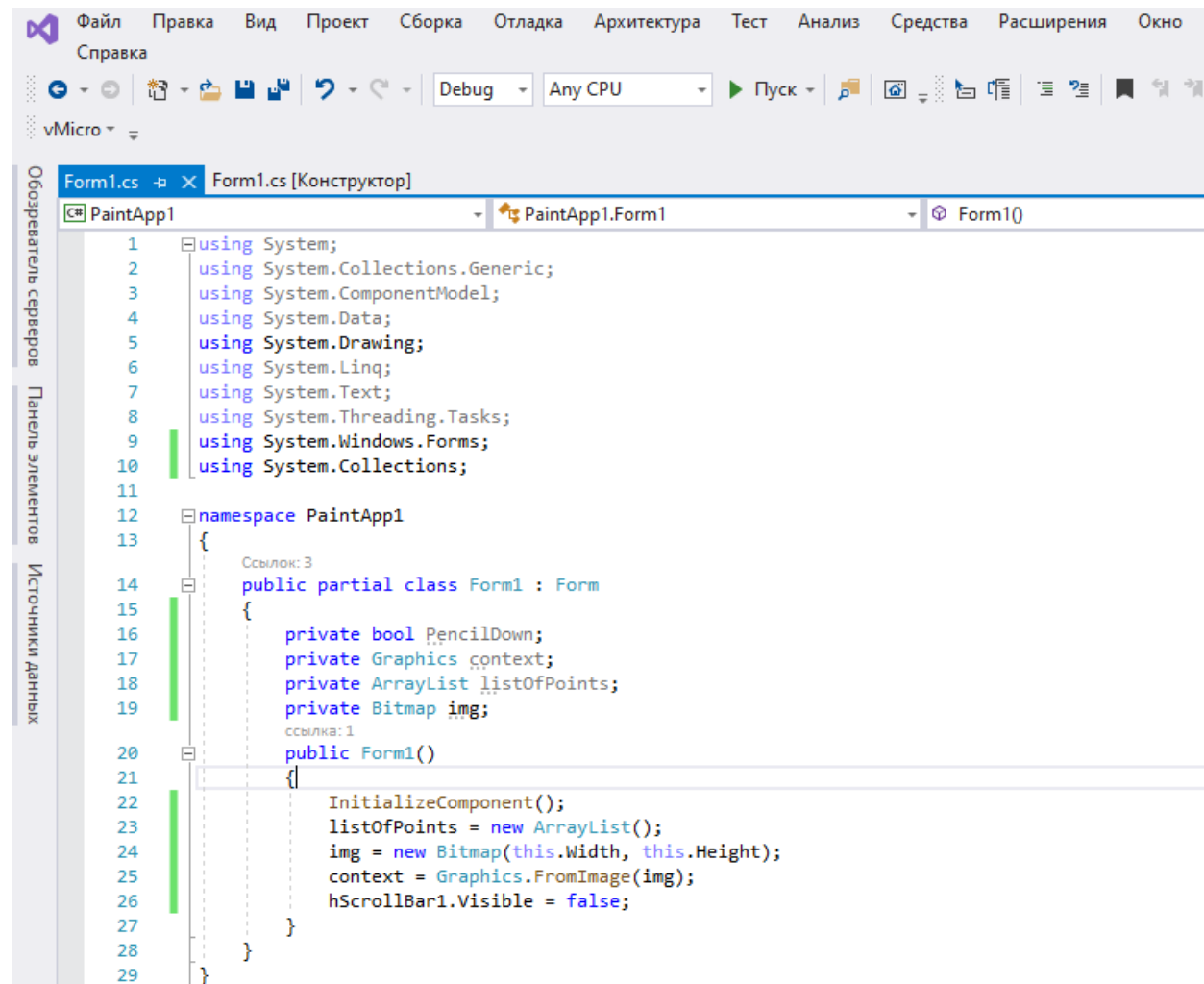
CONTEXT MENU STRIP

ADDING LABEL AND SCROLL BAR

ADDING DRAWING

ADDING METHODS OF ELEMENTS


```csharp
        private bool PencilDown;
        private Graphics context;
        private ArrayList listOfPoints;
        private Bitmap img;
        ссылка: 1
        public Form1()
        {
            InitializeComponent();
            listOfPoints = new ArrayList();
            img = new Bitmap(this.Width, this.Height);
            context = Graphics.FromImage(img);
            hScrollBar1.Visible = false;
        }

        ссылка: 1
        private void changeColorToolStripMenuItem_Click(object sender, EventArgs e)
        {
            ColorDialog dlg = new ColorDialog();
            if (dlg.ShowDialog() == DialogResult.OK)
                this.ForeColor = dlg.Color;
        }

        ссылка: 1
        private void thicknessToolStripMenuItem_Click(object sender, EventArgs e)
        {
            hScrollBar1.Visible = true;
        }

        ссылка: 1
        private void Save(Control c, string file)
        {
            Graphics g = c.CreateGraphics();
            Bitmap picture = new Bitmap(c.Width, c.Height);
            c.DrawToBitmap(picture, new Rectangle(c.ClientRectangle.X, c.ClientRectangle.Y, c.Width, c.Height));
            picture.Save(file);
            picture.Dispose();
        }

        ссылка: 1
        private void saveToolStripMenuItem_Click(object sender, EventArgs e)
        {
            Save(this, "picture.jpg");
            MessageBox.Show("Image was saved");
        }
```

ADDING MOUSEUP AND MOUSEMOVE METHODS


```csharp
            }

    // ссылка: 1
            private void Form1_MouseUp(object sender, MouseEventArgs e)
            {
                if(e.Button == MouseButtons.Left)
                {
                    Point p = new Point(-1, -1);
                    listOfPoints.Add(p);
                    PencilDown = false;
                    label1.Text = "MouseUp";
                    Invalidate();
                }
            }

    // 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();
                }
            }

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

ADDING MOUSEDOWN METHOD

```csharp
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();
    }
}

Ссылок: 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