Form1.cs (меню)

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Formsy
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            Calculator calculator = new Calculator();
            calculator.Show();
            this.Hide();
        }

        private void button2_Click(object sender, EventArgs e)
        {
            RNG rng = new RNG();
            rng.Show();
            this.Hide();
        }

        private void button3_Click(object sender, EventArgs e)
        {
            Converter con = new Converter();
            con.Show();
            this.Hide();
        }
    }
}
```

Calculator.cs

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Formsy
{
    public partial class Calculator : Form
    {
```

```
double a;
bool aok = false;
double b;
bool bok = false;
public Calculator()
{
    InitializeComponent();
    comboBox.SelectedIndex = 0;
}

private void calc()
{
    if (aok && bok)
    {
        int op = comboBox.SelectedIndex;
        switch (op)
        {
            case 0:
                answer.Text = (a + b).ToString();
                break;
            case 1:
                answer.Text = (a - b).ToString();
                break;
            case 2:
                answer.Text = (a * b).ToString();
                break;
            case 3:
                answer.Text = (a / b).ToString();
                break;
            case 4:
                answer.Text = (Math.Pow(a,b)).ToString();
                break;
            case 5:
                answer.Text = (a % b).ToString();
                break;
            case 6:
                answer.Text = (Math.Floor(a / b)).ToString();
                break;
            case 7:
                answer.Text = (Math.Log(a,b)).ToString();
                break;
        }
    } else
    {
        answer.Text = "???";
    }
}

private void comboBox_SelectedIndexChanged(object sender, EventArgs e)
{
    calc();
}

private void upd1num()
{
    try
    {
        a = Double.Parse(firstNumber.Text.ToString());
        aok = true;
    }
    catch
    {
        aok = false;
    }
    calc();
```

```
        }

        private void upd2num()
        {
            try
            {
                b = Double.Parse(secondNumber.Text.ToString());
                bok = true;
            }
            catch
            {
                bok = false;
            }
            calc();
        }

        private void firstNumber_Leave(object sender, EventArgs e)
        {
            upd1num();
        }

        private void secondNumber_Leave(object sender, EventArgs e)
        {
            upd2num();
        }

        private void firstNumber_KeyDown(object sender, KeyEventArgs e)
        {
            if (e.KeyCode == Keys.Enter) secondNumber.Focus();
        }

        private void secondNumber_KeyDown(object sender, KeyEventArgs e)
        {
            if (e.KeyCode == Keys.Enter) answer.Focus();
        }

        private void firstNumber_TextChanged(object sender, EventArgs e)
        {
            upd1num();
        }

        private void secondNumber_TextChanged(object sender, EventArgs e)
        {
            upd2num();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            Form1 form1= new Form1();
            form1.Show();
            this.Hide();
        }
    }
}
```

RNG.cs

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
```

```
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Formsy
{
    public partial class RNG : Form
    {
        public RNG()
        {
            InitializeComponent();
            comboBox1.SelectedIndex = 0;
        }

        private void button1_Click(object sender, EventArgs e)
        {
            try
            {
                double a = Double.Parse(textBox1.Text.ToString());
                double b = Double.Parse(textBox2.Text.ToString());
                Random r = new Random();
                textBox3.Text = (Math.Floor((a + r.NextDouble()*(b-a))*Math.Pow(10,
comboBox1.SelectedIndex))/Math.Pow(10, comboBox1.SelectedIndex)).ToString();

            } catch
            {
                textBox3.Text = "???";
            }
        }

        private void button2_Click(object sender, EventArgs e)
        {
            Form1 form1 = new Form1();
            form1.Show();
            this.Hide();
        }
    }
}
```

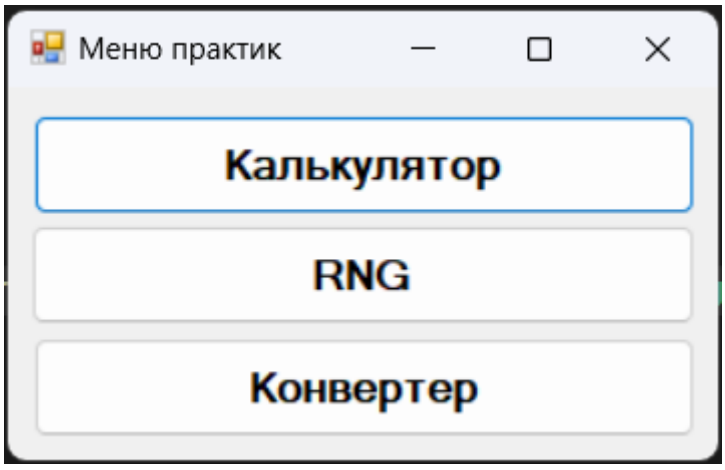
Converter.cs

```
using System;
using System.Collections.Generic;
using System.Collections.ObjectModel;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Formsy
{
    public partial class Converter : Form
    {
        public Converter()
        {
            InitializeComponent();
```

```
            comboBox1.SelectedIndex = 0;
            comboBox2.SelectedIndex = 0;
        }

        private void comboBox1_SelectedIndexChanged(object sender, EventArgs e)
        {
            comboBox2.Items.Clear();
            switch (comboBox1.SelectedIndex)
            {
                case 0:
                    comboBox2.Items.Add("F");
                    break;
                case 1:
                    comboBox2.Items.Add("C");
                    break;
                case 2:
                    comboBox2.Items.Add("см");
                    comboBox2.Items.Add("м");
                    comboBox2.Items.Add("км");
                    break;
                case 3:
                    comboBox2.Items.Add("мм");
                    comboBox2.Items.Add("м");
                    comboBox2.Items.Add("км");
                    break;
                case 4:
                    comboBox2.Items.Add("мм");
                    comboBox2.Items.Add("см");
                    comboBox2.Items.Add("км");
                    break;
                case 5:
                    comboBox2.Items.Add("мм");
                    comboBox2.Items.Add("см");
                    comboBox2.Items.Add("м");
                    break;
                case 6:
                    comboBox2.Items.Add("кг");
                    comboBox2.Items.Add("т");
                    break;
                case 7:
                    comboBox2.Items.Add("г");
                    comboBox2.Items.Add("т");
                    break;
                case 8:
                    comboBox2.Items.Add("г");
                    comboBox2.Items.Add("кг");
                    break;
            }
            comboBox2.SelectedIndex = 0;
            calc();
        }

        private void textBox1_TextChanged(object sender, EventArgs e)
        {
            calc();
        }

        private void calc()
        {
            try
            {
                double a = Double.Parse(textBox1.Text.ToString());
                if (comboBox1.Text.Equals("C")) textBox2.Text = (Math.Round((a * 9 /
5 + 32) * 100) / 100).ToString();
```

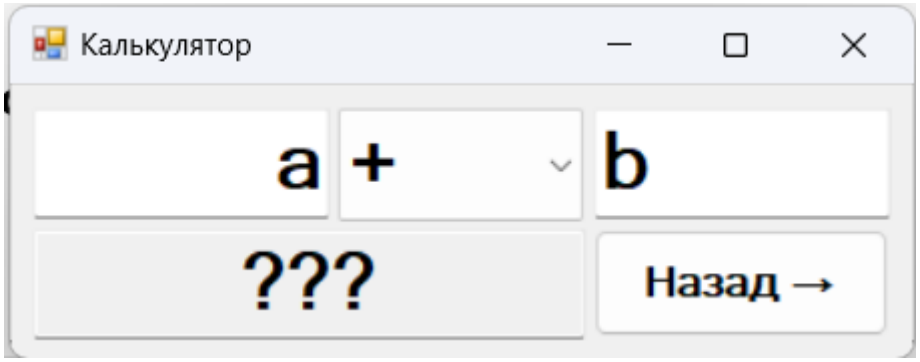
```
                if (comboBox1.Text.Equals("F")) textBox2.Text = (Math.Round(((a -
32) * 5 / 9) * 100) / 100).ToString();
                double m1 = 1;
                double m2 = 1;
                if (comboBox1.Text.Equals("см")) m1 = 0.1;
                if (comboBox1.Text.Equals("м")) m1 = 0.001;
                if (comboBox1.Text.Equals("км")) m1 = 0.000001;
                if (comboBox1.Text.Equals("кг")) m1 = 0.001;
                if (comboBox1.Text.Equals("т")) m1 = 0.000001;

                if (comboBox2.Text.Equals("см")) m2 = 0.1;
                if (comboBox2.Text.Equals("м")) m2= 0.001;
                if (comboBox2.Text.Equals("км")) m2 = 0.000001;
                if (comboBox2.Text.Equals("кг")) m2 = 0.001;
                if (comboBox2.Text.Equals("т")) m2 = 0.000001;
                if (!(m1 == 1 && m2 == 1) ) textBox2.Text = ((m2 / m1) *
a).ToString();
                //if (!(m1 == 1 && m2 == 1) && m1 < m2) textBox2.Text = ((m2 / m1) *
a).ToString();
            }
            catch
            {
                textBox2.Text = "???";
            }
        }

        private void comboBox2_SelectedIndexChanged(object sender, EventArgs e)
        {
            calc();
        }

        private void button2_Click(object sender, EventArgs e)
        {
            Form1 form1 = new Form1();
            form1.Show();
            this.Hide();
        }
    }
}
```

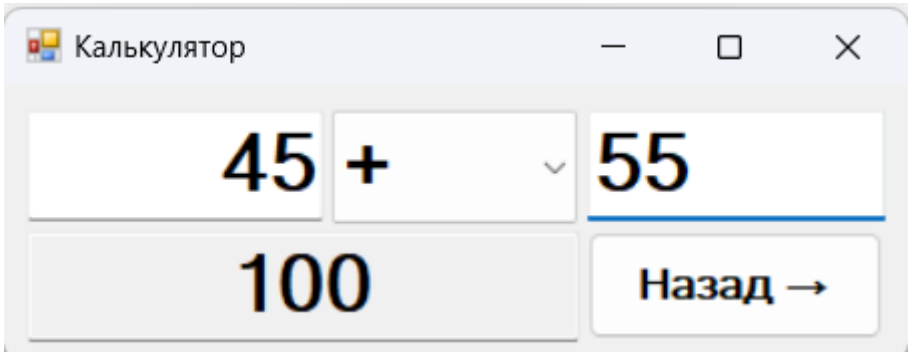
Меню

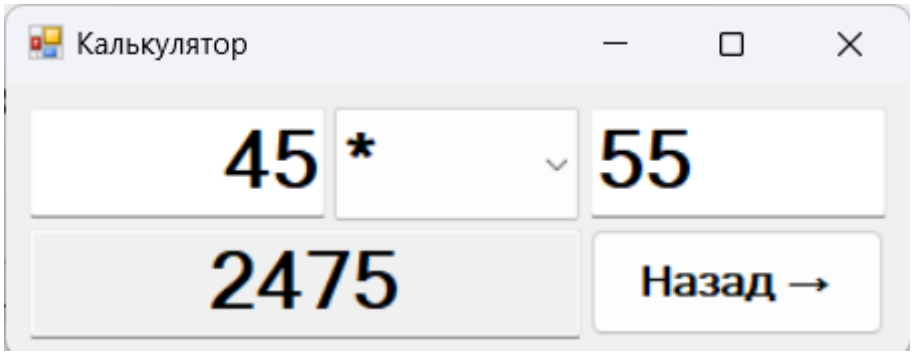


Калькулятор

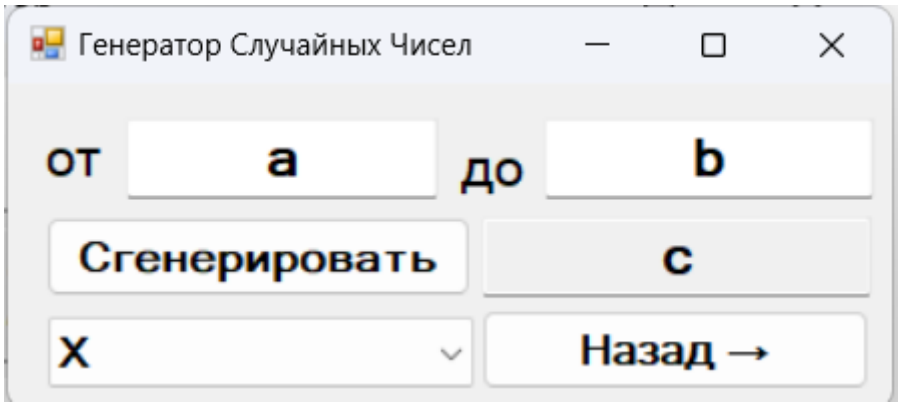
(результат вычисляется динамически)

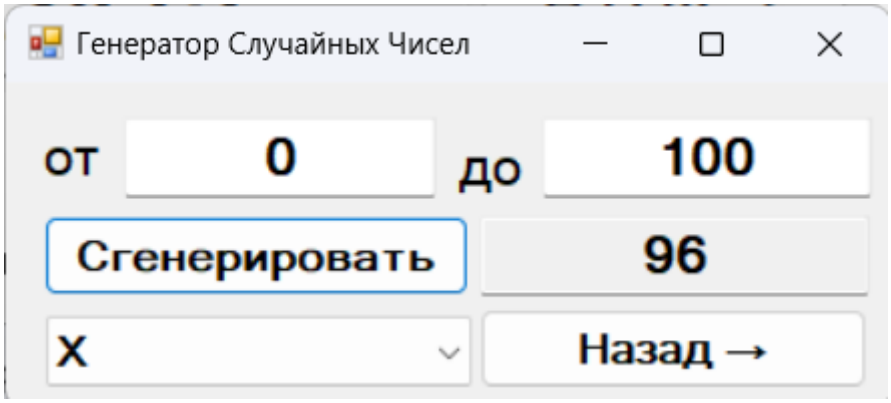


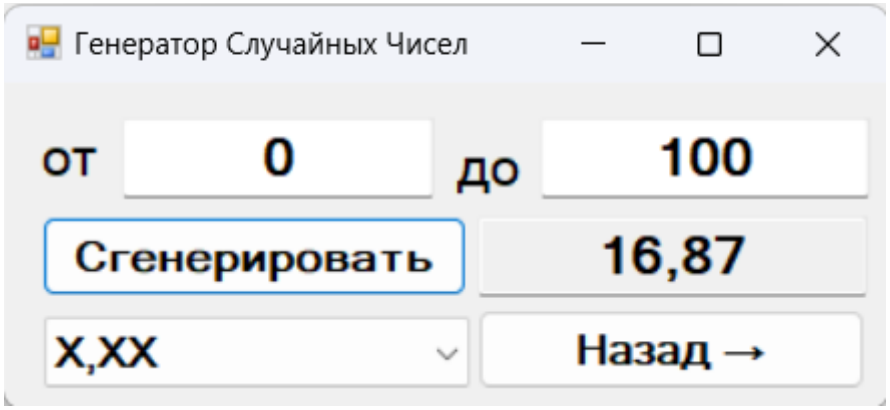




Генератор случайных чисел







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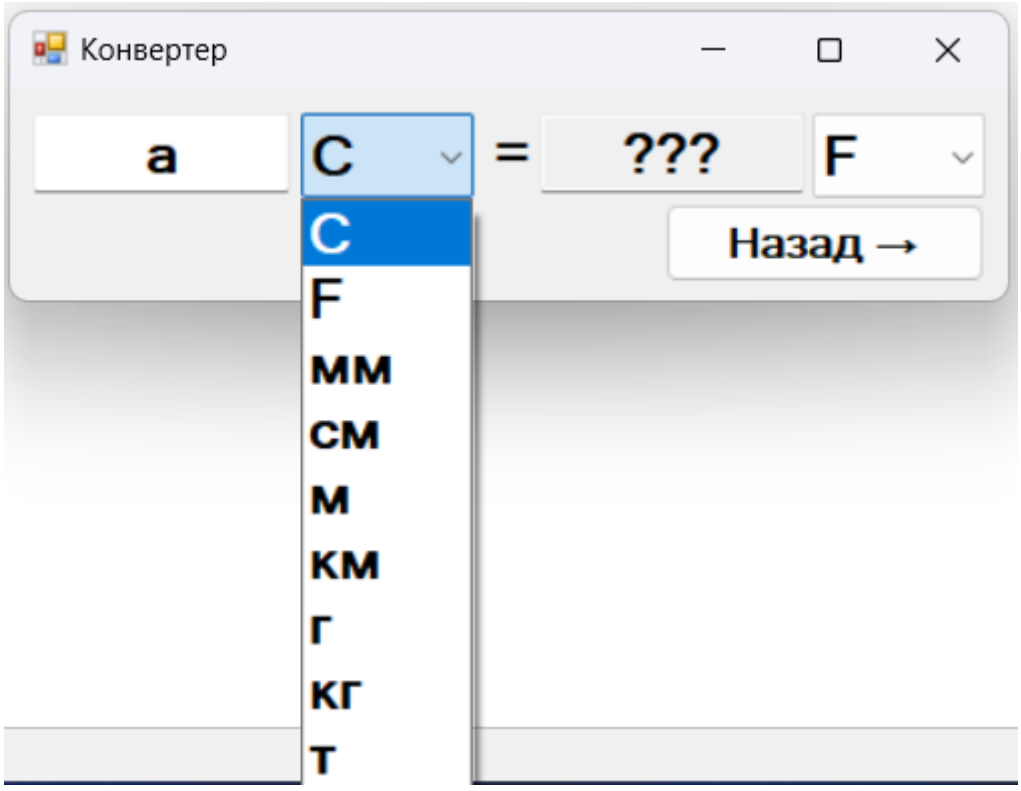
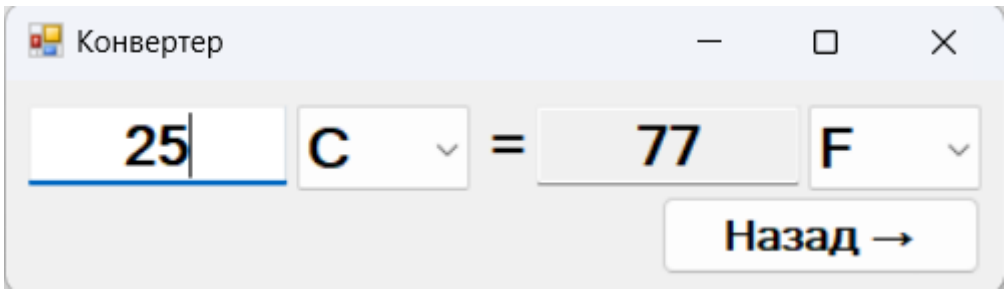
(результат тоже динамический)




Конвертер
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C
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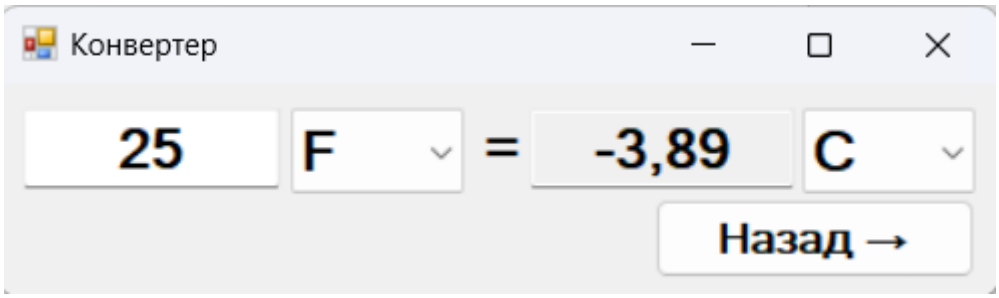
77
F
Назад →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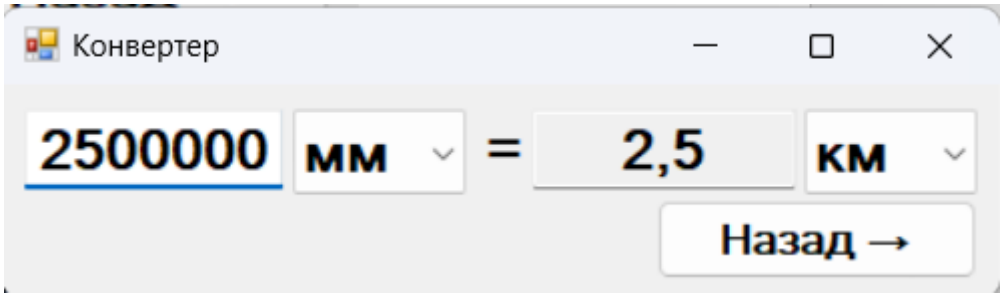
Конвертер
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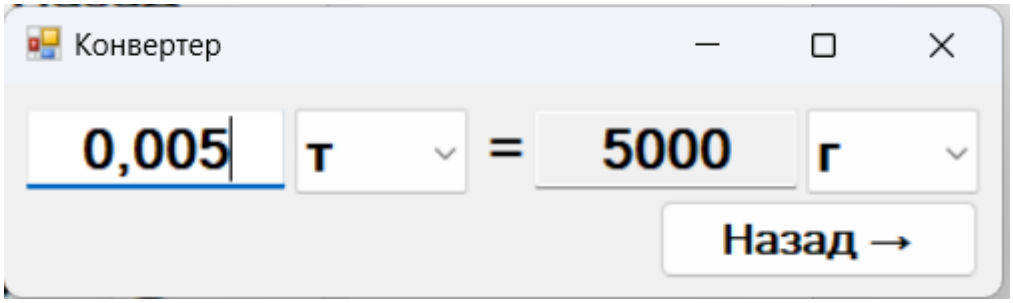
Конвертер
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