

```
1 using System;
2 using System.Collections.Generic;
3 using System.Drawing;
4 using System.Windows.Forms;
5
6 namespace Lab5
7 {
8     class Panel0peration : Panel
9     {
10
11         private readonly TextBox[] txt = new TextBox[3];
12         private readonly Label[] label = new Label[3];
13         private readonly ComboBox cbx = new ComboBox();
14         private readonly List<string> labelsText = new List<string>() { "النتائج", "العدد الثاني", "العدد الأول" };
15         public double TextN1 { get => GetDouble(txt[2]); set => txt[2].Text = value.ToString(); }
16         public double TextN2 { get => GetDouble(txt[1]); set => txt[1].Text = value.ToString(); }
17         public double TextN3 => GetDouble(txt[0]);
18
19         public Panel0peration()
20         {
21             InitializeComponent();
22         }
23
24         private void InitializeComponent()
25         {
26             Size = new Size(600, 200);
27             AutoSize = true;
28             AutoSizeMode = AutoSizeMode.GrowAndShrink;
29             // إنشاء الحقول والعناوين
30             for (int i = 0; i < 3; i++)
31             {
32                 label[i] = new Label()
33                 {
34                     Size = new Size(150, 40),
35                     Location = new Point((i == 2) ? i * 150 + 100 : i * 150 + 50, 10),
36                     Text = labelsText[i],
37                     Font = new Font("Tahoma", 12F)
38                 };
39
40                 txt[i] = new TextBox()
41                 {
42                     Size = new Size(150, 50),
43                     Location = new Point((i == 2) ? i * 150 + 100 : i * 150 + 20, 50),
44                     Font = new Font("Tahoma", 12F)
```

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45         };
46         txt[i].KeyPress += OnlyNumbers;
47
48         Controls.Add(label[i]);
49         Controls.Add(txt[i]);
50     }
51
52     // إنشاء القائمة المنسدلة
53     cbx.Width = 70;
54     cbx.Font = new Font("Tahoma", 12F);
55     cbx.Location = new Point(txt[1].Left + txt[1].Width + 2, 50);
56     cbx.Items.AddRange(new string[] { "+", "-", "*", "/" });
57     cbx.SelectedIndexChanged += (s, e) => PerformOperation();
58
59     Controls.Add(cbx);
60 }
61
62 private void OnlyNumbers(object sender, KeyPressEventArgs e)
63 {
64     if (!char.IsDigit(e.KeyChar) && e.KeyChar != '\b')
65         // (e.KeyChar) Keys.Back
66         e.Handled = true;
67 }
68
69 private double GetDouble(TextBox textBox)
70 {
71     return double.TryParse(textBox.Text, out double value) ? value : 0;
72 }
73
74 private void PerformOperation()
75 {
76     if (cbx.SelectedItem == null || string.IsNullOrEmpty(txt[1].Text) || string.IsNullOrEmpty(txt[2].Text))
77         return;
78
79     double num1 = TextN1, num2 = TextN2;
80     string result = txt[0].Text;
81
82     switch (cbx.SelectedItem.ToString())
83     {
84         case "+":
85             result = (num1 + num2).ToString();
86             break;
87         case "-":
88             result = (num1 - num2).ToString();
89             break;
90         case "*":
91             result = (num1 * num2).ToString();
92             break;
```

```
93         case "/":
94             result = (num2 != 0) ? (num1 / num2).ToString() : "خطأ";
95             break;
96     }
97
98     txt[0].Text = result;
99 }
100 // private void PerformOperation()
101 // {
102 //     if (cbx.SelectedItem == null || string.IsNullOrEmpty(txt
103 // [1].Text) || string.IsNullOrEmpty(txt[2].Text))
104 //         return;
105 //     double num1 = TextN1, num2 = TextN2;
106 //     txt[0].Text = cbx.SelectedItem.ToString() switch
107 //     {
108 //         "+" => (num1 + num2).ToString(),
109 //         "-" => (num1 - num2).ToString(),
110 //         "*" => (num1 * num2).ToString(),
111 //         "/" => (num2 != 0) ? (num1 / num2).ToString() : "خطأ",
112 //         _ => txt[0].Text
113 //     };
114 // }
115 }
116 }
117
```