

```
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Text;
5 using System.Threading.Tasks;
6 using System.Windows;
7 using System.Windows.Controls;
8 using System.Windows.Data;
9 using System.Windows.Documents;
10 using System.Windows.Input;
11 using System.Windows.Media;
12 using System.Windows.Media.Imaging;
13 using System.Windows.Navigation;
14 using System.Windows.Shapes;
15
16 namespace TriangleCheck
17 {
18     /// <summary>
19     /// Interaction logic for MainWindow.xaml
20     /// </summary>
21     public partial class MainWindow : Window
22     {
23         List<Triangle> triangles = new List<Triangle>();
24         public MainWindow()
25         {
26             InitializeComponent();
27         }
28
29         private void TextBox_TextChanged(object sender, TextChangedEventArgs e)
30         {
31
32         }
33
34
35         private void buttonClick(object sender, RoutedEventArgs e)
36         {
37             isTriangle();
38         }
39
40         private void isTriangle()
41         {
42             double number1, number2, number3;
43             bool success1 = double.TryParse(triangleInput1.Text, out number1);
44             bool success2 = double.TryParse(triangleInput2.Text, out number2);
45             bool success3 = double.TryParse(triangleInput3.Text, out number3);
46             outputBlock.Text = "";
47             if (success1 && success2 && success3)
48             {
49                 if (number1 > 0 && number2 > 0 && number3 > 0 && number1 >
```

```
+ number2 > number3 && number2 + number3 > number1 &&
number1 + number3 > number2)

50     {
51         triangles.Add(new Triangle { side1 = number1, side2
= number2, side3 = number3, message = "可以形成三角
形!" });
52         resultOutput.Background = Brushes.Green;
53         resultOutput.Text = $"{number1}、{number2}、{number3}
可以形成三角形!";
54     }
55     else
56     {
57         triangles.Add(new Triangle { side1 = number1, side2
= number2, side3 = number3, message = "無法形成三角
形!" });
58         resultOutput.Background = Brushes.Red;
59         resultOutput.Text = $"{number1}、{number2}、{number3}
無法形成三角形!";
60     }
61 }
62 else
63 {
64     MessageBox.Show("請輸入大於0的數字哦!");
65 }
66 foreach (Triangle triangle in triangles)
67 {
68     outputBlock.Text += $"{triangle.side1}、
{triangle.side2}、{triangle.side3}、{triangle.message}
\n";
69 }
70 }
71 }
72 }
73 }
```