```csharp
1  using System;
2  using System.Collections.Generic;
3  using System.Drawing;
4  using System.Linq;
5  using System.Text;
6  using System.Threading.Tasks;
7  using System.Windows.Forms;
8
9  namespace Lab3
10 {
11     delegate void ButtonClickHandler();
12     delegate void mydelmsg(String s);
13     delegate int mydel(int n);
14
15     public delegate TResult MyFunc<in T1, in T2,out TResult>(T1 arg1, T2       ⮧
          arg2);
16     class Myint<T>
17     {
18
19         T value;
20         //public   Myint<T>() { };
21      public void setValue(T value) { this.value = value; }
22      public   T getValue() { return this.value; }
23
24     }
25
26     class Program : Form
27     {
28
29
30         Button b1, b2, b3;
31         TextBox t;
32         public event ButtonClickHandler OnClick;
33      static   mydelmsg msg = (s) =>{ MessageBox.Show(s.ToString()); };
34
35
36         MyFunc<int, int, int> add = (x,y) => x + y;
37         MyFunc<float, float, float> addd = (x, y) => x + y;
38         Myint<int> myint = new Myint<int>();
39         Myint<float> myfloat = new Myint<float>();
40
41       static  Func<int,int >l =(x)=>  x* x;
42       static  Func<int,int,int > sq =(x,y)=>  x* y;
43         void SayHello() => MessageBox.Show("Hello!");
44             void SayGoodbye() => MessageBox.Show("Goodbye!");
45
46         public Program()
47         {
48
```

```csharp
49              CreateTool(t = new TextBox(), new Rectangle(50, 20, 60, 20),
                    "fact", this);
50              CreateTool(b1 = new Button(), new Rectangle(10, 50, 60, 20),
                    "fact", this);
51              CreateTool(b2 = new Button(), new Rectangle(120, 50, 60, 20),
                    "abs", this);
52
53              //this.Click();
54              this.OnClick += SayHello;
55          }
56
57      void CreateTool(Control control,Rectangle rectangle,String txt,Control
        parent)
58          {
59              control.Text = txt;
60              control.Bounds = rectangle;
61              //control.Click += delegate (Object o, EventArgs e)
                    {MessageBox.Show(e.ToString()); };
62              //control.Click += delegate{MessageBox.Show(e.ToString()); };
63               control.Click += (o,e)=>MessageBox.Show(e.ToString());
64              control.Click +=new EventHandler((e,s)=>{
65                  this.OnClick.Invoke();
66                  MessageBox.Show(add(2,2).ToString());
67                  MessageBox.Show(addd(2.2f,2.3f).ToString());
68                  myint.setValue(222);
69                  myfloat.setValue(222.222f);
70                  MessageBox.Show(myint.getValue().ToString());
71                  MessageBox.Show(myfloat.getValue().ToString());
72                  //Buttonn button = new Buttonn();
73                  //button.OnClick += SayHello;
74                  //button.OnClick += SayGoodbye;
75
76                  //button.Click(); //
77              });
78              parent.Controls.Add(control);
79          }
80
81      static void Main(string[] args)
82          {
83              Myint<int> num = new Myint<int>();
84              Myint<double> fnum = new Myint<double>();
85              fnum.setValue(1000.1000);
86              msg(fnum.getValue().ToString());
87              Program p = new Program();
88              msg("gggggggggggggggg");
89              msg(l(5).ToString());
90          msg(sq(5,10).ToString());
91          msg(p.add(5,10).ToString());
92              new Program().ShowDialog();
```

```
93            }
94        }
95  }
96
```