

### 实验 1.3

#### 一. 运行结果

##### 1. 计算

##### (1) 两个实根

Form1

a b c

1 4 2

x1= -0.59 x2= -3.41

计算 清空 结束

##### (2) 重根

Form1

a b c

1 4 4

x1= 2 x2= 重根

计算 清空 结束

##### (3) 两个复根

Form1

a                      b                      c

1                      4                      9

x1= -2+2.24i                      x2= -2-2.24i

计算                      清空                      结束

## 2. 清空

Form1

a                      b                      c

x1=                      x2=                     

计算                      清空                      结束

## 二. 代码说明

### 1. 计算

```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim a As Double
    Dim b As Double
    Dim c As Double
    Dim d As Double

    a = Val(TextBox1.Text)
    b = Val(TextBox2.Text)
```

```

c = Val(TextBox3.Text)
d = b ^ 2 - 4 * a * c
If d > 0 Then
    TextBox4.Text = Format((-b + Math.Sqrt(d)) / (2 * a), "0.00")
    TextBox5.Text = Format((-b - Math.Sqrt(d)) / (2 * a), "0.00")
ElseIf d = 0 Then
    TextBox4.Text = b / (2 * a)
    TextBox5.Text = "重根"
Else
    TextBox4.Text = -b / (2 * a) & "+" & Format(Math.Sqrt(-d) / (2 * a),
"0.00") & "i"
    TextBox5.Text = -b / (2 * a) & "-" & Format(Math.Sqrt(-d) / (2 * a),
"0.00") & "i"
End If

```

```
End Sub
```

## 2. 清空

```

Private Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click
    TextBox1.Text = ""
    TextBox2.Text = ""
    TextBox3.Text = ""
    TextBox4.Text = ""
    TextBox5.Text = ""

```

```
End Sub
```

## 3. 结束

```

Private Sub Button3_Click(sender As Object, e As EventArgs) Handles Button3.Click
    End
End Sub

```