

Visual Basic 程序设计习题、试题(补充-程序改错)

(提示：每一题的程序有 2 处错误，错误均在 “ ’*ERROR* ” 注释行，请直接在该行修改。不得增加或减少程序行数，也不得删除或修改错误标记’*ERROR*。)

程序改错1

题干：程序的功能是：随机产生并输出 100 以内大于 50 的 20 个整数，输出时每 5 个数一行。

```
Option Explicit
Private Sub Form_Click()
    Randomize Timer
    Dim i As Integer, ma As Integer
    i = 0

    Do Until i < 20                                '*ERROR1*
        ma = Int(Rnd() * 100 + 1)
        If ma > 50 Then
            Print ma;
            i = i + 1
            If i \ 5 = 0 Then                        '*ERROR2*
                Print
            End If
        End If
    Loop
End Sub
```

参考答案：

ERROR1 Do While i <= 20

ERROR2 If i Mod 5 = 0 then 或 If i / 5 = Int(i / 5) Then

程序改错2

题干：程序的功能是：计算 $s=1^2-2^2+3^2-\dots+(-1)^{(n+1)}N^2$ (N 是偶数)，并输出结果。

```
Private Sub Form_Click()
    Dim s As Double
    Dim i As Integer, n As Integer
    Dim c As Integer
    s = 0
    i = 1; c = 1                                    '*ERROR*
    n = Val(InputBox("请输入大于零的偶数 n: "))
    Do
        s = s + c * i * i
        c = -1                                       '*ERROR*
        i = i + 1
    Loop While i <= n
    Print "n="; n, "累加和为"; s
End Sub
```

参考答案：

ERROR1 i = 1 : c = 1

ERROR2 c = -c

分析：变量 c 用于控制多项式中每一项的正、负号输出。

程序改错3

题干：程序的功能是：从键盘上输入若干个学生的考试分数，当输入负值时结束输入，然后输出其中的最高分和最低分。

```
Private Sub Form_click()  
    Dim x As Single, amax As Single, amin As Single  
    x = InputBox("请输入考试分数:")  
    amax = x  
    amin = x  
    Do While x <> 0                                '*ERROR*  
        If x > amax Then  
            amax = x  
        End If  
        If x > amin Then                            '*ERROR*  
            amin = x  
        End If  
        x = InputBox("请输入下一个考试分数:")  
    Loop  
    Print "最高分="; amax, "最低分="; amin  
End Sub
```

参考答案：

ERROR1 Do While x >= 0

ERROR2 If x < amin Then 或 If x <= amin Then

程序改错4

题干：程序的功能是：输出 1~100 之间的完数。（完数是指不包括自身的约数之和的数。如：6=1+2+3，6 是完数）

```
Private Sub Form_Click()  
    Dim s As Integer, i As Integer, j As Integer  
    For i = 1 To 100  
        s = 0  
        For j = 1 To i - 1  
            If i / j = 0 Then                        '*ERROR*  
                s = s + j  
            End If  
        Next j  
        If s <> i Then                                '*ERROR*  
            Print i  
        End If  
    Next i  
End Sub
```

参考答案：

ERROR1 If i Mod j = 0 Then

ERROR2 If s = i Then

程序改错5

题干：程序的功能是：输出 20 个随机正实数，然后分别计算并输出它们的整数部分与小数部分之和。

```
Private Sub Form_Click()  
    Dim a(20) As Double, str As String  
    Dim i As Integer, sum1 As Long, sum2 As Single  
    Randomize  
    For i = 1 To 20  
        a(i) = Int(Rnd * 1000) / 100  
        str = str & Format(a(i), "0.00") & " "  
        If i Mod 5 = 0 Then str = str & vbCrLf  
        sum1 = sum1 + a(i)           '*ERROR*  
        sum2 = sum2 + a(i) - Int(a(i))  
    Next i  
    Print " 原始数据为：" & vbCrLf  
    Print a(i)                     '*ERROR*  
    Print "整数部分之和为：" & sum1  
    Print "小数部分之和为：" & sum2  
End Sub
```

参考答案：

ERROR1 sum1 = sum1 + int(a(i))

ERROR2 Print str

程序改错6

题干：程序的功能是：求任意两个整数的最小公倍数。

```
Private Sub Form_Click()  
    Dim m As Integer  
    Dim n As Integer  
    Dim i As Integer  
    m = Val(InputBox("请输入第一个数"))  
    n = Val(InputBox("请输入第二个数"))  
    If m > n Then  
        Min = m  
    Else  
        Min = n  
    End If  
    For i = Min To m * n  
        If i Mod m = 0 And i Mod n = 0 Then  
            Print m & "和" & n & "的最小公倍数是：" & i  
            Print Min           '*ERROR*  
            Exit                 '*ERROR*  
        End If  
    Next i  
End Sub
```

参考答案：

ERROR1 Print i

ERROR2 Exit For

程序改错7

题干：程序的功能是：计算 S 的近似值，直到最后一项的绝对值小于 0.0001 为止。

```
Private Sub Form_Click()  
    Dim s As Single, k As Integer  
    s = 1  
    k = 1  
    Do  
        ' 循环变量增加 1  
        k = s + 1  
        s = s + (-1) ^ (k + 1) / k  
        ' 循环条件  
        Loop Until k > 0.0001  
        Print s  
    End Sub
```

参考答案：

ERROR1 k = k + 1

ERROR2 Loop Until 1 / k < 0.0001

程序改错8

题干：程序的功能是：找出被 3、7 除，余数皆为 1 的最小的 5 个正整数。

```
Private Sub Form_Click()  
    Dim i As Integer, n As Integer  
    Dim c As Integer  
    c = 0  
    n = 1  
    Do  
        n = n + 1  
        If n Mod 3 = 0 Or n Mod 7 = 0 Then  
            Print n  
            c = c + 1  
        End If  
        ' 循环条件  
        Loop Until n >= 5  
    End Sub
```

参考答案：

ERROR1 If n Mod 3 = 1 And n Mod 7 = 1 Then

ERROR2 Loop Until c >= 5

程序改错9

题干：程序的功能是：计算满足以下条件的三位偶数的个数。条件为，个位数与十位数之和除以 10 所得的余数恰好是其百位数。

```
Private Sub Form_Click()
```

```

Dim count As Integer
Dim a As Integer, b As Integer, c As Integer
Dim x As Integer
count = 0
x = 100
While x <= 999                                '*ERROR*'
    a = Int(x / 100)
    b = Int(x / 10) - a * 10
    c = x - a * 100 - b * 10
    if mod(x,2)=0 OR mod(b+c,10)=a then      '*ERROR*'
        count = count + 1
        Print x;
    End If
    x = x + 1
Loop
Print count
End Sub

```

参考答案:

ERROR1 Do While x <= 999

ERROR2 If x Mod 2 = 0 And (b + c) Mod 10 = a Then

程序改错10

题干: 程序的功能是: 已知鸡和兔子共 50 只 140 条腿, 计算并输出鸡和兔子各自的数量。

```

Private Sub Form_Click()
    '下一条语句将变量 x 和 y 声明为整型
    Dim x, y As String                                '*ERROR*'
    For x = 1 To 49
        y = 50 - x
        If 2 * x + 4 * y = 140 Then                    '*ERROR*'
            Print "兔子" & x & "只, 鸡" & y & "只"
        End If
    Next x
End Sub

```

参考答案:

ERROR1 Dim a As Integer, y As Integer

ERROR2 If 4 * x + 2 * y = 140 Then

程序改错11

题干: 程序的功能是: 已知我国现有人口 13 亿, 假设年增长率为 0.4%, 计算多少年后总人口将超过 14 亿。

```

Private Sub Form_Click()
    Dim x As Single, n As Integer
    x = 13
    n = 0
    Do

```

```

        x = x * 1.04          '*ERROR*'
        n = n + 1
    Loop Until x < 14        '*ERROR*'
    Print n; "年后我国人口将超过 14 亿，达到"; x; "亿"
End Sub

```

参考答案:

```

*ERROR1*   x = x * 1.004
*ERROR2*   Loop Until x > 14

```

程序改错12

题干: 程序的功能是: 通过键盘向文本框中输入数字, 如果输入的是非数字字符, 则提示输入错误, 且文本框中不显示输入的字符。通过单击“添加”按钮, 将文本框中的数字添加到 Combo1 中。



```

Private Sub Command1_Click()
    Combo1.AddItem                      '*ERROR*'
    Combo1.Text = Text1.Text
    Text1.Text = ""
    Text1.SetFocus
End Sub
Private Sub Text1_KeyPress(KeyAscii As Integer)
    If KeyAscii > 57 Or KeyAscii < 48 Then
        MsgBox "请输入数字!"
        KeyAscii = ""                  '*ERROR*'
    End If
End Sub

```

参考答案:

```

*ERROR1*   Combo1.AddItem Text1.Text
*ERROR2*   KeyAscii = 0

```

程序改错13

题干: 程序的功能是: 求 $s=1+21+321+4321+54321+654321$ 的值。

```

Private Sub Form_Click()
    Dim s As Long, s1 As Long, i As Integer, j As Integer
    s = 0
    For i = 1 To 6
        s1 = 0
        For j = 1 To 6          '*ERROR*'
            s1 = s1 + j * 10 ^ j    '*ERROR*'
        Next j
    Next i

```

```

        Print s1
        s = s + s1
    Next i
    Print "s="; s
End Sub

```

参考答案:

```

*ERROR1* For j = 1 To i
*ERROR2* s1 s1 + j * 10 ^ (j - 1)

```

程序改错14

题干: 程序的功能是: 计算 $2/1+3/2+5/3+8/5+13/8+\cdots$ 前 20 项之和。

```

Option Explicit
Private Sub Form_Click()
    Dim s!, f1!, f2!, f3!, i%
    s = 0
    f1 = 1
    f2 = 2
    For i = 1 To 20
        s = s + f1 / f2          '*ERROR*'
        f3 = f1                  '*ERROR*'
        f1 = f2
        f2 = f3
    Next i
    Print "s="; s
End Sub

```

参考答案:

```

*ERROR1* s = s + f2 / f1
*ERROR2* f3 = f1 + f2

```

程序改错15

题干: 程序的功能是: 计算表达式 $z=(x+2)^2+(x+3)^3+(x+4)^4+\cdots+(x+N)^N$ 。

```

Private Function xn(a As Single, m As Integer)
    Dim i As Integer
    tmp = 1
    For i = 1 To m
        tmp = tmp * a
    Next
    xn = a                      '*ERROR*'
End Function
Private Sub Form_Click()
    Dim n As Integer
    Dim i As Integer
    Dim t As Single
    Dim s, x As Single
    n = Val(InputBox("请输入 n 的值: "))

```

```

x = Val(InputBox("请输入 x 的值: "))
z = 0
For i = 2 To n
    t = x + i
    z = z + t          '*ERROR*'
Next
Print z
End Sub

```

参考答案:

```

*ERROR1*  xn = tmp
*ERROR2*  z = z + xn(t, i)

```

程序改错16

题干: 程序的功能是: 找出最大的零巧数。(所谓零巧数是指具有下述特征的四位正整数: 其百位数为 0, 如果去掉 0, 得到一个正整数, 而该正整数乘以 9, 等于原数。)

```

Private Sub Form_Click()
    Dim i As Integer, a As Integer, b As Integer, c As Integer
    For i = 9999 To 1000          '*ERROR*'
        If i \ 100 Mod 10 = 0 Then
            a = i \ 1000
            b = i \ 10 Mod 10
            c = i \ 10          '*ERROR*'
            If (a * 100 + b * 10 + c) * 9 = i Then
                Print "最大的“零巧数”是: " & i
                Exit For
            End If
        End If
    Next i
End Sub

```

参考答案:

```

*ERROR1*  For i = 9999 To 1000 Step -1
*ERROR2*  c = i Mod 10

```

程序改错17

题干: 程序的功能是: 判断一个整数的奇偶性, 并在图片框中输出偶数。

```

Private Sub Form_click()
    Dim n As Integer
    n = Int(InputBox("请输入一个数: "))
    If n Mod 2 <> 0          '*ERROR*'
    Else
        Print n          '*ERROR*'
    End If
End Sub

```

参考答案:

ERROR1 If n Mod 2 <> 0 Then

ERROR2 Picture1.Print n

程序改错18

题干：程序的功能是：求任意三个整数的最大公约数。

```
Private Sub Form_Click()  
    Dim a(3) As Integer  
    a(1) = Val(InputBox("请输入第 1 个数"))  
    a(0) = a(1)  
    a(2) = Val(InputBox("请输入第 2 个数"))  
    If a(0) > a(2) Then a(0) = a(2)  
    a(3) = Val(InputBox("请输入第 3 个数"))  
    If a(0) > a(3) Then a(0) = a(3)  
    Do Until a(0) > 0                                '*ERROR*  
        If a(1) Mod a(0) = 0 And a(2) Mod a(0) = 0 And a(3) Mod a(0) = 0 Then  
            Print a(1) & "和" & a(2) & "和" & a(3) & "的最大公约数是:"; a(0)  
            End                                         '*ERROR*  
        End If  
        a(0) = a(0) - 1  
    Loop  
End Sub
```

参考答案：

ERROR1 Do While a(0) >= 1

ERROR2 Exit Do

程序改错19

题干：程序的功能是：产生 5 个介于 0~50 之间的随机整数（包括 0 和 50）存入数组 x 中，计算并输出它们的平方根之和。

```
Option Base 1  
Private Sub Form_Click()  
    Dim x(10)  
    Dim i As Integer  
    Dim j As Integer  
    Dim Sum As Single  
    Sum = 0  
    Randomize  
    For i = 1 To 5  
        x(i) = Int(Rnd * 50)                        '*ERROR*  
        Sum = Sum + Sqr(i)                          '*ERROR*  
        Print x(i)  
    Next i  
    Print "平方根之和为" & Sum  
End Sub
```

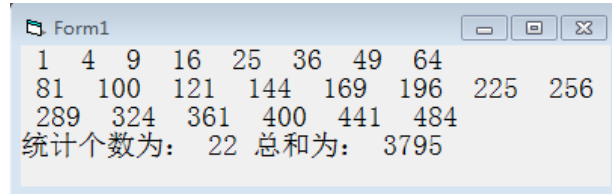
参考答案：

ERROR1 x(i) = Int(Rnd*51)

ERROR2 Sum = Sum + Sqr(x(i))

程序改错20

题干：程序的功能是：输出 500 以内算术平方根为整数的所有数，并统计其个数及总和（每行最多显示 8 项）。运行效果如下图所示。



```
Private Sub Form_Click()  
    Dim n As Integer, i As Integer, f As Integer, a As Integer, s As Integer  
    For n = 1 To 500  
        For i = 1 To Sqr(n)  
            If n = i ^ 2 Then  
                f = 1  
                a = a + 1  
                s = s + i  
                Print n;  
            End If  
        Next i  
        If f = 1 And a \ 8 = Int(a \ 8) Then  
            Print  
            f = 0  
        End If  
    Next n  
    Print  
    Print "统计个数为: "; a; "总和为: "; s  
End Sub
```

参考答案：

ERROR1 s = s + n

ERROR2 If f = 1 And a / 8 = Int(a / 8) Then

程序改错21

题干：程序的功能是：求能被 3 整除且至少有一位数字为 5 的三位数的个数。

```
Private Sub Form_Click()  
    Dim count As Integer, x As Integer  
    Dim a As Integer, b As Integer, c As Integer  
    x = 100  
    Do While x <= 999  
        If x Mod 3 = 0 Then  
            a = x / 100  
            b = Int((x - a * 100) / 10)  
            c = x - a * 100 - b * 10  
            If a = 5 Or b = 5 Or c = 5 Then
```

```

        count = count + 1
    End If
End If
x = x + 1
Wend                                     '*ERROR*'
Print count
End Sub

```

参考答案:

ERROR1 a = Int(x / 100)

ERROR2 Loop

程序改错22

题干: 程序的功能是: 输出 40 以内能够被 3 整除的所有数, 按每行 5 个数显示。

```

Private Sub Form_Click()
Dim x As Integer
Dim i As Integer
i = 1                                     '*ERROR*'
For x = 1 To 40
    If (x / 3) = (x \ 3) Then
        Print x;
        i = i + 1
    End If
    If i Mod 3 = 0 Then                   '*ERROR*'
        Print
    End If
Next x
End Sub

```

参考答案:

ERROR1 i = 0

ERROR2 If i Mod 5 = 0 Then

程序改错23

题干: 程序的功能是: 求 200 到 500 之间能被 13 整除但不能被 17 整除的所有数的个数。

```

Private Sub Form_Click()
Dim count As Integer
Dim x As Integer
count = 0
x = 200
While x <= 500                             '*ERROR*'
    If x Mod 13 = 0 Or x Mod 17 <> 0 Then    '*ERROR*'
        Print x;
        count = count + 1
    End If
    x = x + 1
Loop

```

```
Print count
End Sub
```

参考答案:

```
*ERROR1* Do While x <= 500
*ERROR2* If x Mod 13 = 0 And x Mod 17 <>0 Then
```

程序改错24

题干: 程序的功能是: 计算并输出 Fibonacci 数列的前 n 项 (Fibonacci 数列的特点是: 前两个数为 1、1, 从第 3 个数开始, 每个数都是前面两个数的和)。

```
Private Sub Form_Click()
    Dim F() As Long
    Dim n As Integer, i As Integer, j As Integer
    n = Int(Val(InputBox("请输入n")))

    ReDim                                     '*ERROR1*
    F(1) = 1
    F(2) = 1
    For i = 3 To n
        F(i) = F(i + 1) + F(i + 2)           '*ERROR2*
    Next i
    For i = 1 To n
        Print F(i)
    Next i
End Sub
```

参考答案:

```
*ERROR1* ReDim F(1 To n)
*ERROR2* F(i) = F(i - 1) + F(i - 2)
```

程序改错25

题干: 程序的功能是: 计算斐波那契数列的前 20 项并输出, 该数列的规律是, 前两项的值分别是 1, 从第三项开始, 每一项的值是前两项之和。要求每行输出 5 个数据。

```
Private Sub Form_Click()
    Dim f(1 To 20) As Integer
    f(1) = 1
    f(2) = 1
    For i = 3 To 20
        f(i) = f(i + 1) + f(i - 1)           ' 计算第 i 项
                                           '*ERROR*'
    Next i
    Print
    Print "斐波纳契数列前 20 项: "
    For i = 1 To 20
        Print f(i);
                                           ' 每打印 5 个数据后换行
        If i Mod 5 Then
            Print
        End If
    Next i
```

End Sub

参考答案:

ERROR1 $f(i) = f(i - 1) + f(i - 2)$

ERROR2 If i Mod 5 = 0 Then

程序改错26

题干: 程序的功能是: 产生 1~6 之间的随机整数模拟掷骰子出现的点数, 要求掷 100 次, 统计出现次数最多的点数。

```
Private Sub Form_Click()  
    Randomize  
    Dim a%(6), i%, n%, max%, m%  
    For i = 1 To 100  
        n = Int(6 * Rnd) + 1  
        a(i) = a(i) + 1  
    Next i  
    max = 0  
    For i = 1 To 6  
        Print "点数为"; i; "出现的次数为:"; a(i)  
        If a(i) < max Then  
            max = a(i)  
            m = i  
        End If  
    Next i  
    Print "出现次数最多的点数为: "; m  
End Sub
```

参考答案:

ERROR1 $a(n) = a(n) + 1$

ERROR2 If a(i) >= max Then 分析: 变量 max 用于存放数组 a(i) 中的最大值。

程序改错27

题干: 程序的功能是: 用随机函数模拟掷骰子, 统计掷 50 次骰子出现各点的次数。

```
Private Sub Form_Click()  
    Dim a(1 To 6) As Integer  
    Randomize  
    For i = 1 To 50  
        '' 产生 1~6 之间的整数  
        n = Int(Rnd * 6)  
        '' 统计某个数出现的次数  
        a(n) = n + 1  
    Next i  
    For i = 1 To 6  
        Print i; "点出现"; a(i); "次"  
    Next i  
End Sub
```

参考答案:

ERROR1 $n = \text{Int}(\text{Rnd} * 6) + 1$

ERROR2 $a(n) = a(n) + 1$

程序改错28

题干：程序的功能是：生成 10 个三位数随机素数，输出其中最大素数和最小素数。

```
Private Sub Form_Click()  
    Dim x As Integer  
    Dim i As Integer, c1 As Integer  
    Dim max As Integer, min As Integer  
    min = 1000  
    max = 0  
    Randomize  
    Do  
        x = Int(900 * Rnd) + 100  
        For i = 2 To x \ 2  
            If x Mod i = 0 Then Exit For          '*ERROR1*  
        Next i  
        If i > x \ 2 Then  
            c1 = c1 + 1  
            Print Str(x);  
            If x > max Then max = x  
            If x < min Then min = x  
        End If  
    Loop Until c1 > 10                          '*ERROR2*  
    Print Chr(10) & "最大素数为：" & max  
    Print Chr(10) & "最小素数为：" & min  
End Sub
```

参考答案：

ERROR1 If x Mod i = 0 Then Exit For

ERROR2 Loop Until c1 = 10

程序改错29

题干：程序的功能是：求 100 以内素数之和。

```
Private Sub Form_Click()  
    Dim n As Integer, f As Integer, i As Integer, s As Integer  
    For n = 2 To 100  
        f = 1  
  
        For i = 1 To Sqr(n)          '*ERROR1*  
            If n Mod i = 0 Then  
                f = 0: Exit For  
            End If  
        Next i  
        If f = 0 Then s = s + n      '*ERROR2*  
    Next n  
    Print "s=" ; s  
End Sub
```

参考答案：

ERROR1 For i = 2 To Sqr(n) 或 For i = 2 To n 分析：除数需从 2 开始。

ERROR2 If f = 1 Then s = s + n

程序改错30

题干：程序的功能是：产生一个介于 10~100 内的随机整数（包括 10 和 100），然后判断其是否为素数。如果是，在窗体上输出“yes”，否则，输出“no”。

```
Private Sub Form_Click()  
Randomize  
Dim a%, i%  
a = Int(10 + 91 * Rnd)  
For i = 2 To Int(Sqr(a))  
    If (a Mod i) <> 0 Then          '*ERROR*  
        Print a & ":" & "no"  
        '下一条语句用于退出过程  
        Exit For                  '*ERROR*  
    End If  
Next i  
Print a & ":" & "yes"  
End Sub
```

参考答案：

ERROR1 If (a Mod i) = 0 Then

ERROR2 Exit Sub

程序改错31

题干：程序的功能是：输入 5 个学生的成绩，求平均分，并统计高于平均分的人数。

```
Private Sub Form_click()  
Dim a%(1 To 5), i%, SUM%, aver!, n%  
For i = 1 To 5  
    a(i) = Val(InputBox("请输入学生成绩:"))  
    Print a(i)  
    SUM = SUM + a                      '*ERROR*  
Next i  
aver = SUM / 5  
Print "平均分为：" & aver  
For i = 1 To 5  
    If aver > a(i) Then n = n + 1      '*ERROR*  
Next i  
Print "超过平均分的有" & n & "个"  
End Sub
```

参考答案：

ERROR1 SUM = SUM + a(i)

ERROR2 aver < a(i)

程序改错32

题干：程序的功能是：输入若干个学生的成绩（0~100 分之间），当输入-1 时结束，统计学生人数并求出平均成绩。

```
Private Sub Command1_Click()  
Dim i As Integer, score As Integer, sum As Integer, ave As Single  
i = 0  
sum = 0  
score = Val(InputBox("第" & i + 1 & "个成绩,输入-1 结束!"))  
Do While score <> -1  
    i = 1                                '*ERROR*  
    sum = sum + score  
    score = Val(InputBox("第" & i + 1 & "个成绩,输入-1 结束!"))  
Loop  
Text1.Text = i  
If i <> 0 Then  
    ave = sum / i  
    Text2.Text = sum                        '*ERROR*  
Else  
    MsgBox "没有任何学生成绩!"  
End If  
End Sub
```

参考答案：

ERROR1 i = i + 1
ERROR2 Text2.Text = ave

程序改错33

题干：程序的功能是：产生 20 个 0~1000 的随机整数并存入数组，计算这 20 个整数的平均值。

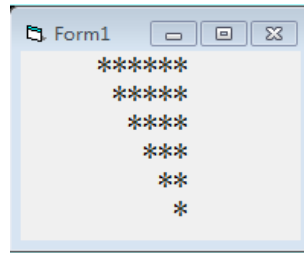
```
Private Sub Form_Click()  
    Dim arrN(20) As Integer  
    Dim Aver As Single  
    Dim sum As Integer, i  
    Randomize  
    For i = 1 To 20  
        arrN(i) = Int(Rnd * 1000)  
    Next i  
    sum = arrN(i)                        '*ERROR*  
    For i = 1 To 20  
        sum = arrN(i)                    '*ERROR*  
    Next i  
    Aver = sum / 20  
    Print Aver  
End Sub
```

参考答案：

ERROR1 sum = 0
ERROR2 sum = sum + arrN(i)

程序改错34

题干：程序的功能是：在窗体上输出如下图所示的图案。



```
Option Explicit
Private Sub Form_Click()
    Dim i As Integer, j As Integer
    i = 0                                '*ERROR*'
    Do While i <= 6
        Print Tab(i + 5);
        j = 1
        Do While j <= 6                '*ERROR*'
            Print "*";
            j = j + 1
        Loop
        Print
        i = i + 1
    Loop
End Sub
```

参考答案：

```
*ERROR1* i = 1
*ERROR2* Do While j <= 7 - i
```

程序改错35

题干：程序的功能是：在窗体上打印如下图所示的图案。

```
FFFFFFFFFFFF
EEEEEEEEEE
DDDDDDDD
CCCCC
BBB
A
```

```
Option Explicit
Private Sub Form_Click()
    Dim i As Integer, j As Integer
    For i = 6 To 1 Step -1
        Print Tab(20 - i);
        For j = 1 To 6        '*ERROR*'
            Print Chr(64 + j); '*ERROR*'
        Next j
        Print
    Next i
End Sub
```

参考答案:

ERROR1 For j = 1 To 2 * i - 1

ERROR2 Print Chr(64 + i);

程序改错36

题干: 程序的功能是: 输出数列: 2, 4, 7, 11, 16, …… ($F(1)=2$, $F(n)=n+F(n-1)$, $n=2, 3, 4, \dots$) 的前 20 项, 要求每行输出 5 个数据, 并计算前 20 项的和。

```
Private Sub Form_Click()  
    Dim f(1 To 20) As Integer  
    Dim s As Integer  
    f(1) = 2  
    s = 2  
    For i = 2 To 20                ' 计算第 i 项  
        f(i) = f(i) + f(i - 1)    ' *ERROR*  
        s = s + f(i)  
    Next i  
    Print  
    Print "数列前 20 项: "  
    For i = 1 To 20  
        Print f(i);              ' 每打印 5 个数据后换行  
        If i Mod 5 Then          ' *ERROR*  
            Print  
        End If  
    Next i  
    Print "前 20 项之和: s="; s  
End Sub
```

参考答案:

ERROR1 f(i) = i + f(i - 1)

ERROR2 If i Mod 5 = 0 Then

程序改错37

题干: 程序的功能是: 已知一个数列的前 3 项为 0, 0, 1, 以后每项为前 3 项的和, 求此数列的第 36 项。

```
Private Sub Form_Click()  
    Dim a&, b&, c&, d&, i%  
    a = 0: b = 0: c = 1  
    For i = 1 To 36                ' *ERROR*  
        d = a  
        a = b  
        b = c  
        c = a + b + c            ' *ERROR*  
    Next i  
    Print c  
End Sub
```

参考答案:

ERROR1 For i = 1 To 33

ERROR2 c = a + b + d

程序改错38

题干：程序的功能是：将 10 个整数从大到小排序。

```
Option Explicit
Private Sub Form_Click()
    Dim t%, m%, n%, w%
    Dim a(10) As Integer
    For m = 1 To 10
        a(m) = Int(10 + Rnd() * 90)
        Print a(m); " ";
    Next m

    Print
    For m = 1 To 9
        t = m
        For n = 2 To 10
            If a(t) > a(n) Then t = n
        Next n
        If t = m Then
            w = a(m)
            a(m) = a(t)
            a(t) = w
        End If
    Next m

    For m = 1 To 10
        Print a(m)
    Next m
End Sub
```

参考答案：

ERROR1 For n = m+1 to 10

ERROR2 If t <> m Then

程序改错39

题干：程序的功能解决一个古典算术问题：王小二是个卖大饼的，他一刀可以把大饼切 2 块，两刀可以切出 4 块，三刀最多可以切 7 块，如此切法，切十刀。要求输出从第一刀到第十刀每刀切出的饼数。

```
Private Sub Form_Click()
    Dim x(10) As Integer
    x(0) = 0
    For i = 1 To 10
        x(i) = i + x(i + 1)
        Print "第" & i & "刀切出的块数：" & x(i)
    Next i
End Sub
```

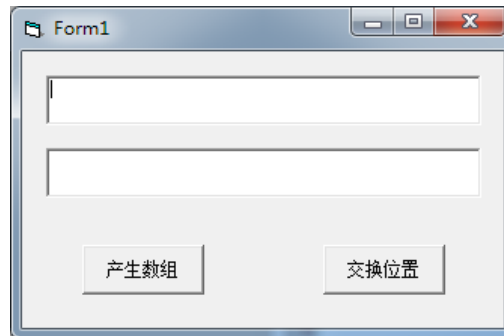
参考答案：

ERROR1 x(0) = 1 分析：数组 x(i) 中存放的是大饼的数量。

ERROR2 x(i) = x(i-1) + i

程序改错40

题干：程序的功能是：随机生成 15 个两位正整数并显示在一个文本框中。再将所有对称位置的两个数据对调后显示在另一个文本框中（第 1 个数与第 15 个数对调，第 2 个数与第 14 个数对调，……）。



```
Option Explicit
Option Base 1
Dim a(15) As Integer
Private Sub Command1_Click()
Dim i As Integer
    Text1.Text = ""
    Randomize
    For i = 1 To 15
        a(i) = Int(90 * Rnd)
        Text1.Text = Text1.Text & CStr(a(i)) & " "
    Next
End Sub
Private Sub Command2_Click()
Dim i As Integer, temp As Integer
    Text2.Text = ""
    '交换 a(i) 和 a(16-i)
    For i = 1 To 15 \ 2
        temp = a(i)
        a(i) = temp
        a(16 - i) = temp
    Next
    For i = 1 To 15
        Text2.Text = Text2.Text & a(i) & " "
    Next
End Sub
```

参考答案：

ERROR1 a(i) = Int(90 * Rnd) + 10

ERROR2 a(i) = a(16 - i)

程序改错41

题干：程序的功能是：求 $s = 2! + 4! + 6! + 8!$ 。

```
Option Explicit
Private Sub Form_Click()
    Dim i As Integer, s As Long
```

```

        For i = 2 To 8                                '*ERROR*
            s = s + fact(i)
        Next i
        Print s
    End Sub
    Public Function fact(n As Integer)
        Dim t As Long
        Dim i As Integer
        t = 1
        For i = 1 To n
            t = t * i
        Next i
        fact = i                                       '*ERROR*
    End Function

```

参考答案:

ERROR1 For i = 2 To 8 Step 2

ERROR2 fact = t

程序改错42

题干: 程序的功能是: 输入一组整数, 通过调用最小值函数查找并输出其中的最小值。

```

Private Sub Form_Click()
    Dim m(5) As Integer, s As Integer
    For i = 1 To 5
        m(i) = Val(InputBox("请输入第" & i & "个数"))
        Print m(i)
        s = min(m, s)                                '*ERROR*
    Next
    MsgBox "已输入数据的最小值为" & s, vbOKOnly, "提示"
End Sub
Private Function min(a, b)
    If a > b Then
        c = a: a = b: b = c
    End If
    s = a                                             '*ERROR*
End Function

```

参考答案:

ERROR1 s = min(m(i), s)

ERROR2 min = a

程序改错43

题干: 程序的功能是: 随机产生一个[3, 50]范围内的一个正整数, 找出所有大于或等于 3, 小于或等于该数的素数, 存入数组中。

```

Private a() As Integer, m As Integer
Private Sub Form_Click()
    Randomize

```

```

m = 0
n = Int(48 * Rnd) + 3
Print "产生的随机数是 " & n & ", 小于或等于该数的素数有: "
For i = 3 To n
    Call prime(i)
Next i
For i = 1 To m
    Print a(i);
Next i
Print
End Sub
Private Sub prime()          '*ERROR*
    For j = 2 To p - 1
        If p \ j = 0 Then    '*ERROR*
            Exit Sub
        End If
    Next j
    If p = j Then
        m = m + 1
        ReDim Preserve a(m)
        a(m) = p
    End If
End Sub

```

参考答案:

```

*ERROR1* Private Sub prime(p)
*ERROR2* If p Mod j = 0 Then

```

程序改错44

题干：程序的功能是：产生并输出一个 5 行 5 列矩阵，输出该矩阵每行最大元素的位置。矩阵元素为随机产生的[1,100]范围内的整数。

```

Private Sub Form_Click()
    Dim a(5, 5) As Integer
    Dim i As Integer, j As Integer
    Dim max As Integer, m As Integer
    For i = 1 To 5
        max = 0
        For j = 1 To 5
            a(i, j) = Int(100 * Rnd) + 1
            If a(i, j) > max Then
                max = a(i, j)
                m = i          '*ERROR*
            End If
            Print a(i, j)      '*ERROR*
        Next j
        Print "a(" & i & ", " & m & ")为最大值"
    Next i

```

End Sub

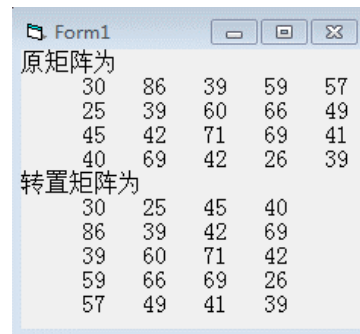
参考答案:

ERROR1 m = j

ERROR2 Print a(i,j)

程序改错45

题干: 程序的功能是: 随机产生一个 4 行 5 列的矩阵, 并输出其转置矩阵。运行效果如下图所示。



```
Private Sub Form_Click()  
    Randomize  
    Dim f(4, 5) As Integer, h(5, 4) As Integer  
    Print "原矩阵为"  
    For i = 1 To 4  
        For j = 1 To 5  
            '下一条语句用于为数组元素赋值, 其范围为[20,90]  
            f(i, j) = Rnd * 70  
            Print Tab(j * 5); f(i, j); ' *ERROR*  
        Next j  
        Print  
    Next i  
    Print "转置矩阵为"  
    For i = 1 To 5  
        For j = 1 To 4  
            h(i, j) = f  
            Print Tab(j * 5); h(i, j); ' *ERROR*  
        Next j  
        Print  
    Next i  
End Sub
```

参考答案:

ERROR1 f(i, j) = Rnd*70 + 20 或 f(i, j) = Int(rnd*71) + 20

ERROR2 h(i, j) = f(j, i)

程序改错46

题干: 程序的功能是: 输出一个 6×6 的矩阵, 要求两条对角线上的元素为 1, 其余元素均为 0。运行效果如下图所示。

| | | | | | |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0 | 1 |
| 0 | 1 | 0 | 0 | 1 | 0 |
| 0 | 0 | 1 | 1 | 0 | 0 |
| 0 | 0 | 1 | 1 | 0 | 0 |
| 0 | 1 | 0 | 0 | 1 | 0 |
| 1 | 0 | 0 | 0 | 0 | 1 |

Option Base 1

Private Sub Form_Click()

Dim A(6, 6) As Integer, I As Integer, J As Integer

'下一条语句用于清除窗体屏幕

Form.Clear

'*ERROR*

For I = 1 To 6

For J = 1 To 6

A(I, J) = 0

If I >= J And I + J <= 6 Then A(I, J) = 1

'*ERROR*

Print A(I, J);

Next J

Print

Next I

End Sub

参考答案:

ERROR1 Form1.Cls

ERROR2 If I = J or I + J = 7 Then A(I, J) = 1

程序改错47

题干: 程序的功能是: 输出一个 4 行 4 列的矩阵, 分别计算每一行所有元素之和, 并输出其中的最大值及其对应的行序号。

Option Base 1

Private Sub Form_Click()

Randomize

Dim Mat(4, 4) As Integer

Dim Sum%, i%, j%, s%

Print "初始矩阵为: "

For i = 1 To 4

For j = 1 To 4

Mat(i, j) = Int(Rnd * 50)

Print Mat(i, j);

Next j

Print

Next i

Sum = 0

num = 0

For i = 1 To 4

s = 0

For j = 1 To 4

s = s + Mat(j, i)

'*ERROR*


```

        Next j
        If s > Sum Then
            Sum = s
            num = i
        End If
    Next i
    Print
    Print "单行元素之和的最大值为：";
    Print s                                '*ERROR*'
    Print "其对应的行序号为："; num
End Sub

```

参考答案：

ERROR1 s = s + Mat(i,j)

ERROR2 Print Sum

程序改错48

题干：程序的功能是：在[0，90]范围内随机产生并输出一个5行5列的矩阵，同时输出该矩阵每列中的最大元素。

```

Private Sub Form_Click()
    Randomize
    Dim A(5, 5) As Integer, max As Integer
    Dim I As Integer, J As Integer
    For I = 1 To 5
        For J = 1 To 5
            A(I, J) = Int(61 * Rnd) + 30
            Print A(I, J);
        Next J
        Print
    Next I
    For I = 1 To 5
        max = A(1, I)                ' 设每列最大值初始值为该列第一个元素。
        For J = 2 To 5
            If A(I, J) > max Then    '*ERROR*'
                max = A(I, J)      '*ERROR*'
            End If
        Next J
        Print " 第" & I & "列最大元素是" & max
    Next I
End Sub

```

参考答案：

ERROR1 If A(J, I) > max Then

ERROR2 max = A(J, I)

程序改错49

题干：程序的功能是：统计任意一个字符串中字母、数字和其他字符的个数。

```

Private Sub Form_Click()
    Dim str As String, i As Integer
    Dim n1 As Integer, n2 As Integer, n3 As Integer
    str = InputBox("请输入一个字符串")
    n1 = 0: n2 = 0 :n3 = 0
    For i = 1 To Len(str)
        s1 = Left(str, i, 1)          '*ERROR1*
        Select Case s1
            Case "A" To "Z", "a" To "z"
                n1 = n1 + 1
            Case "0" <= s1 <= "9"      '*ERROR2*
                n2 = n2 + 1
            Case Else
                n3 = n3 + 1
        End Select
    Next i
    Print "字母个数为:": n1, "数字个数为:": n2, "其他字符个数为:": n3
End Sub

```

参考答案:

ERROR1 s1 = Mid(str, i, 1)

ERROR2 Case “0” To “9” 或 Case 0 To 9

程序改错50

题干：程序的功能是：将任意字符串按逆序输出。如：输入字符串是“1234”，输出字符串为“4321”。

```

Private Sub Form_Click()
    Dim s1 As String, s2 As String, n As Integer
    s1 = InputBox("请输入一个字符串")
    Print "原字符串为:": s1
    s2 = 0          '*ERROR*
    n = Len(s1)
    Do While n >= 1
        s2 = s2 & Mid(s1, n, 1)
        n = n + 1    '*ERROR*
    Loop
    Print "逆序字符串为:": s2
End Sub

```

参考答案:

ERROR1 s2 = ""

ERROR2 n = n - 1

程序改错51

题干：程序的功能是：把字符串中偶数位置上的字符用 MsgBox 输出。例如：输入的字符串为“ABCDEFGH”时，则输出的字符串应为：“BDFH”。

```

Private Sub Form_Click()
    Dim s As String, i As Integer
    Dim pristr As String, outstr As String
    s = ""

```

```

pristr = InputBox("please input a string")
For i = 2 To Len(pristr)                                '*ERROR*
    outstr = Mid(pristr, i, 1)
    s = outstr & s                                      '*ERROR*
Next i
MsgBox s
End Sub

```

参考答案:

ERROR1 For i = 2 To Len(pristr) Step 2

ERROR2 s = s & outstr

程序改错52

题干: 程序的功能是: 将任意长度的字符串中的字符顺序倒置。

```

Private Sub Form_Click()
    Dim i As Integer, n As Integer
    Dim c As String, s As String, t As String
    t = ""
    s = InputBox("请输入字符串: ")                '统计字符串长度
    n = Lenth(s)                                    '*ERROR*
    For i = n To 1 Step -1                          '取出第 i 个字符
        c = Mid(i, s, 1)                            '*ERROR*
        t = t & c
    Next i
    MsgBox (t)
End Sub

```

参考答案:

ERROR1 n = Len(s)

ERROR2 c = Mid(s, i, 1)

程序改错53

题干: 程序的功能是: 将一英文字符串全部转换为大写并在标签 Label1 中显示, 同时将原字符串显示在文本框 Text1 中。

```

Private Sub Form_click()
    Dim a1 As String, a2 As String
    a1 = "aAbBBbAa"
    a2 = LCase(a1)                                    '*ERROR*
    Label1.Caption = a2
    Text1.Caption = a1                                '*ERROR*
End Sub

```

参考答案:

ERROR1 a2 = UCase(a1)

ERROR2 Text1.Text = a1

程序改错54

题干：程序的功能是：输入字符串，找出其中所有的大写字母并按逆序输出。

```
Private Sub Command1_Click()  
Dim s As String, d As String, t As String  
Dim i As Integer  
Text1.SetFocus  
s = Text1.Text  
For i = 1 To Len(s)  
    If Mid(s, i, 1) >= "A" And Mid(s, i, 1) <= "Z" Then  
        t = t & Mid(s, i, 1)  
    End If  
Next i  
For i = Len(t) To 1          '*ERROR*  
    d = d & Mid(t, i, 1)  
Next i  
Text2.Text = i              '*ERROR*  
End Sub
```

参考答案：

ERROR1 For i = Len(t) To 1 Step -1

ERROR2 Text2.Text = d

程序改错55

题干：程序的功能是：输入一字符串，统计小写字母“a”的个数。

```
Private Sub Form_Click()  
Dim i%, s$, ch$, n%  
s = InputBox("请输入字符串：")  
Print "字符串为："; s  
n = 1                                '*ERROR*  
For i = 1 To Len(s)  
    ch = Mid(s, i, 1)  
    If UCase(ch) = "a" Then n = n + 1    '*ERROR*  
Next  
Print "字符 a 的个数为："; n  
End Sub
```

参考答案：

ERROR1 n = 0

ERROR2 If ch = "a" Then n = n + 1

程序改错56

题干：程序的功能是：将任意字符串按逆序输出。如：输入的字符串是“12345”，则输出的字符串“54321”。

```
Private Sub Form_Click()  
Dim s1 As String, s2 As String, n As Integer  
s1 = InputBox("请输入一个字符串")
```

```

Print "原字符串为: "; s1
s2 = ""
n = Len(s1)
Do Until n >= 0                                '*ERROR*'
    s = Mid("s1", n)                            '*ERROR*'
    s2 = s2 & s
    n = n - 1
Loop
Print "逆序字符串为: "; s2
End Sub

```

参考答案:

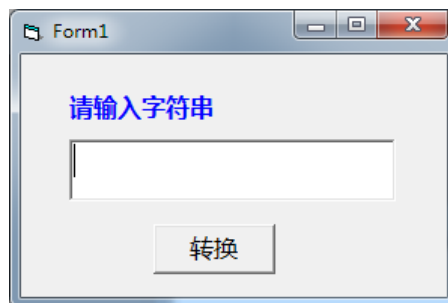
```

*ERROR1* Do Until n < 1
*ERROR2* s = Mid(s1,n,1)

```

程序改错57

题干: 程序的功能是: 单击“转换”按钮, 把 Text1 中的大写字母转换为小写, 小写字母转换为大写。



```

Private Sub Command1_Click()
Dim a$, b$, k%, n%
a = 0                                '*ERROR*'
n = Asc("a") - Asc("A")
For k = 1 To Len(Text1.Text)
    b = Mid(Text1.Text, k, 1)
    If b >= "a" And b <= "z" Then
        b = String(1, Asc(b) - n)
    Else
        If b >= "A" And b$ <= "Z" Then
            b = String(1, Asc(b) + n)
        End If
    End If
    a = a + b
Next k
Text1.Text = k                        '*ERROR*'
End Sub

```

参考答案:

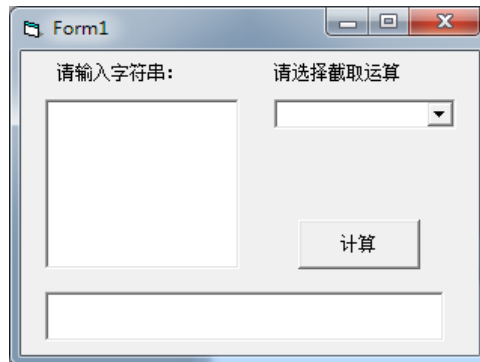
```

*ERROR1* a = ""
*ERROR2* Text1.Text = a

```

程序改错58

题干：程序的功能是：在文本框 Text1 中输入任意的一个字符串（要求字符串的长度 ≥ 10 ），然后选择组合框中的 3 个截取运算符选项之一。单击“计算”按钮，将截取运算后的结果显示在 Text2 中。



```
Private Sub Command1_Click()  
    Dim tmpStr As String * 50  
    Select Case Combo1                                '*ERROR*  
        Case 0  
            tmpStr = Left(Trim(Text1.Text), 3)  
        Case 1  
            tmpStr = Right(Trim(Text1.Text), 3)  
        Case 2  
            tmpStr = Mid(Trim(Text1.Text), 3, 4)  
    End Select  
    Text2.Text = Text1.Text                            '*ERROR*  
End Sub  
Private Sub Form_Load()  
    Combo1.AddItem "左"  
    Combo1.AddItem "右"  
    Combo1.AddItem "中间"  
End Sub
```

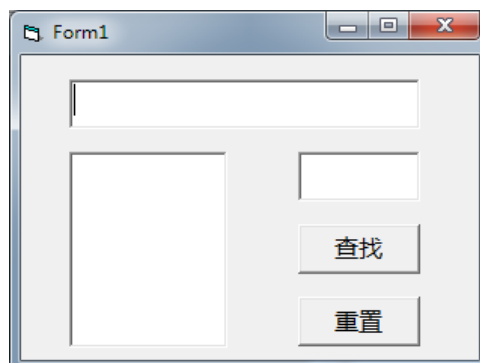
参考答案：

ERROR1 Select Case Combo1.ListIndex

ERROR2 Text2.Text = tmpStr

程序改错59

题干：程序的功能是：输入一个包含字母数字的字符串，找出其中的数字串并求和。



```
Private Sub Command1_Click()
```

```

Dim s As String
Dim k As Integer, i As Integer
Dim sum As Integer
Dim flag As Boolean
s = Text1.Text
sum = 0
For i = 1 To Len(s)
    flag = 1 '*ERROR*
    k = 0
    Do While Mid(s, i, 1) >= "0" And Mid(s, i, 1) <= "9"
        flag = True
        k = k * 10 + Mid(s, i, 1)
        i = i + 1
    Loop
    If flag Then
        List1.AddItem '*ERROR*
        sum = sum + k
    End If
Next i
Text2.Text = sum
End Sub
Private Sub Command2_Click()
    Text1.Text = ""
    Text2.Text = ""
    List1.Clear
End Sub

```

参考答案:

```

*ERROR1* flag = False
*ERROR2* List1.AddItem k

```

程序改错60

题干：程序的功能是：将任意一个十进制整数转换为二进制数。

```

Private Sub Form_Click()
    Dim d As Integer, b As String, i As Integer
    d = Val(InputBox("请输入一个十进制数："))
    Print "十进制数 " & d;
    i = 0
    b = ""
    Do While d <> 0
        b = b & d Mod 2 '*error*
        d = d / 2 '*error*
    Loop
    Print " 转换为二进制数是 " & b
End Sub

```

参考答案:

ERROR1 b = d Mod 2 & b

ERROR2 d = d \ 2

程序改错61

题干：程序的功能是：使用 Print 语句在 d 盘创建一个学生通讯录（该文件是名字为 stu_address.txt 的顺序文件，文件号为 1）。

```
Private Sub Form_Click()  
    Open "d:\stu_address.txt" For Input As #1          '*ERROR1*  
    Stu_name$=InputBox$("请输入学生姓名：","数据输入")  
    Stu_addr$=InputBox$("请输入学生家庭住址：","数据输入")  
    Print #1, Stu_name$, Stu_addr$  
    Exit                                                '*ERROR2*  
End Sub
```

参考答案：

ERROR1 Open "d:\ stu_address.txt" For OutPut As #1

分析：在 Open 语句中，模式 OutPut 用于建立一个新的文件。

ERROR2 Close 或 Close #1 分析：用 Open 语句打开的文件必须要用 Close 语句进行关闭。

程序改错62

题干：程序的功能是：读出存储在当前目录下 data1.txt 文件中的 10 个数，按从大到小顺序排序后，存入 data2.txt 文件中。

```
Private Sub Form_Click()  
    Dim n As Integer, i As Integer, j As Integer, a(10) As Integer, t As Integer  
    Open App.Path & "\data1.txt" For Input As #1  
    n = 0  
    Do While Not EOF(1)  
        n = n + 1  
        Input #1, a(n)  
        Print a(n);  
    Loop  
    Close #1  
    Print  
    For i = 1 To n - 1  
        For j = i + 1 To n  
            If a(j) < a(j + 1) Then          '*ERROR*  
                t = a(i)  
                a(i) = a(j)  
                a(j) = t  
            End If  
        Next j  
    Next i  
    Open App.Path & "\data2.txt" For Output As #1  
    For i = 1 To n  
        Print a(i);  
        Write a(i), #1                      '*ERROR*  
    Next i
```



```
Close #1  
End Sub
```

参考答案:

ERROR1 If a(j) < a(j) Then

ERROR2 Print a(i), #1