

```
1 Public Class Form1
2     '*****
3     '* 11900-1060308 Program Start *
4     '*****
5     Dim b, a, op, y, x, ans As New ArrayList '存檔案的值和運算結果
6     Dim rno As Integer '紀錄資料筆數
7     Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load
8         Call rdata()
9         Call sp()
10        Call wdata()
11    End Sub
12
13    Sub rdata() '讀資料
14        FileOpen(1, "C:\Users\msHOME\source\11900\範例光碟\1060308.SM",
15            OpenMode.Input)
16        Dim d '暫存讀入的資料，型態不同所以不宣告型態
17        Do While Not EOF(1) '讀完所有資料
18            Input(1, d) : b.Add(d)
19            Input(1, d) : a.Add(d)
20            Input(1, d) : op.Add(d)
21            Input(1, d) : y.Add(d)
22            Input(1, d) : x.Add(d)
23            rno = rno + 1 '資料筆數
24        Loop
25        FileClose(1)
26    End Sub
27
28    Sub sp() '做四則運算
29        Dim m1, m2, j As Integer '存分子、分母、公因數
30        For i = 0 To rno - 1
31            '判斷運算符號，並算出分子分母
32            Select Case op(i)
33                Case "+"
34                    m1 = b(i) * x(i) + a(i) * y(i)
35                    m2 = a(i) * x(i)
36                Case "-"
37                    m1 = b(i) * x(i) - a(i) * y(i)
38                    m2 = a(i) * x(i)
39                Case "*"
40                    m1 = b(i) * y(i)
41                    m2 = a(i) * x(i)
42                Case "/"
43                    m1 = b(i) * x(i)
44                    m2 = a(i) * y(i)
45            End Select
46
47            '約分到最簡分數
48            j = 2
49            Do While j <= m1 And j <= m2
50                Do While m1 Mod j = 0 And m2 Mod j = 0
51                    m1 = m1 / j
52                    m2 = m2 / j
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52         Loop
53         j = j + 1
54     Loop
55
56     '運算結果加入到ans
57     If m1 = 0 Then
58         ans.Add(0)
59     ElseIf m2 = 1 Then
60         ans.Add(m1)
61     Else
62         ans.Add(m1 & "/" & m2)
63     End If
64 Next
65 End Sub
66
67 Sub wdata() '輸出結果
68     Dim dt As New DataTable
69     dt.Columns.Add("VALUE1")
70     dt.Columns.Add("OP")
71     dt.Columns.Add("VALUE2")
72     dt.Columns.Add("ANSWER")
73
74     For i = 0 To rno - 1
75         Dim dr As DataRow = dt.NewRow
76         dr(0) = b(i) & "/" & a(i)
77         dr(1) = op(i)
78         dr(2) = y(i) & "/" & x(i)
79         dr(3) = ans(i)
80         dt.Rows.Add(dr)
81     Next
82
83     dgv.DataSource = dt
84 End Sub
85 End Class
86
```