

```
1 Imports System.Text
2
3 Public Class Form1
4     '*****
5     '* 11900-1060307 Program Start *
6     '*****
7
8     Dim suit(4) As String '花色
9     Dim mark(51) As Integer '0沒有發過牌 1有發過牌
10    Dim card_p() = {"A", "2", "3", "4", "5", "6", "7", "8", "9", "10", "J", "Q", "K"} '點數
11    Dim card_v() = {13, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12} '比值
12    Dim gn As Integer '遊戲次數
13    Dim play, bank, result As New ArrayList '紀錄發給玩家和莊家的牌以及比大小後的結果
14
15    Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load
16        '宣告花色
17        suit(0) = Encoding.UTF8.GetString({226, 153, 160})
18        suit(1) = Encoding.UTF8.GetString({226, 153, 165})
19        suit(2) = Encoding.UTF8.GetString({226, 153, 166})
20        suit(3) = Encoding.UTF8.GetString({226, 153, 163})
21
22        Call rdata()
23        Call game()
24        Call wdata()
25    End Sub
26
27    Sub rdata() '讀資料
28        FileOpen(1, "C:\Users\mshome\source\11900\範例光碟\1060307.SM",
29            OpenMode.Input)
30        Input(1, gn) '第一筆為遊戲次數
31        For i = 1 To gn * 2
32            Dim r As Single '存隨機數
33            Dim k As Integer '轉換成牌編號
34            Do
35                Input(1, r)
36                k = Int(r * 52) 'Int()無條件捨去小數點
37            Loop While mark(k) = 1 '不斷重複迴圈直到抽到的牌沒有被重複抽到
38            mark(k) = 1 '標示已經被抽過
39            If i Mod 2 = 1 Then
40                play.Add(k) '牌發給玩家
41            Else
42                bank.Add(k) '牌發給莊家
43            End If
44        Next
45    End Sub
46
47    Sub game() '比大小
48        For i = 0 To gn - 1 'ArrayList從0開始
49            Dim a As Integer '紀錄比值相減的結果
```

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50         '算出各自的比值後相減
51         '算比值：先將抽到的牌編號/13取餘數，得出0~12的結果，再到card_v()對應出 ➤
           比值
52         a = card_v(play(i) Mod 13) - card_v(bank(i) Mod 13)
53         Select Case a
54             Case Is > 0
55                 result.Add("玩家贏")
56             Case 0
57                 result.Add("平手")
58             Case Is < 0
59                 result.Add("莊家贏")
60         End Select
61     Next
62 End Sub
63
64 Sub wdata() '輸出結果
65     Dim dt As New DataTable '新增資料表
66
67     dt.Columns.Add("序號") '新增欄位名稱
68     dt.Columns.Add("玩家")
69     dt.Columns.Add("莊家")
70     dt.Columns.Add("結果")
71
72     For i = 0 To gn - 1
73         Dim dr As DataRow = dt.NewRow '新增一行
74         dr(0) = i + 1 '序號
75         dr(1) = suit(play(i) \ 13) & card_p(play(i) Mod 13) '花色：取牌編 ➤
           號/13的整數 點數：取牌編號/13的餘數
76         dr(2) = suit(bank(i) \ 13) & card_p(bank(i) Mod 13)
77         dr(3) = result(i) '結果
78
79         dt.Rows.Add(dr) '將列新增到資料表
80     Next
81
82     dgv.DataSource = dt '資料表內容顯示在dgv上
83 End Sub
84 End Class
85
```