**Problem7**：進位判斷**(13%)**

加法的運算是把2 個整數靠右對齊，然後由右至左，一位一位相加。如果相加的結果大

於等於10 就有進位（carry）發生。請寫個程式來判斷兩個正整數相加時，產生了幾次進位的

情況。

輸入說明：

第一行的數字，表示有幾組測試資料，第二行開始的每一行即為一筆測試資料。每一行

輸入的資料有兩個正整數，以一個空格分開，每個整數的長度均小於100 位數。

輸出說明：

對每一筆測試資料，輸出相加後有幾次進位的次數。

輸入範例：

2

123 456

555 555

輸出範例：

0

3

程式碼：

Imports System.IO

Public Class Form1

Dim fr As New FileInfo("in.txt")

Dim fw As New FileInfo("out.txt")

Dim sw As StreamWriter = fw.CreateText

Dim ia, n As Byte

Dim ib(1), num(2), oa(2), ob(2) As Integer

Dim ic As String

Private Sub Form1\_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load

If fr.Exists = False Then

End

ElseIf fw.Exists = False Then

fw.Create()

End If

Dim sr As StreamReader = fr.OpenText

ia = sr.ReadLine

For i = 1 To ia

ic = Trim(sr.ReadLine) : ReDim ib(2) : n = 0

For j = 1 To Len(ic) '帶入美行數 並分解

If Microsoft.VisualBasic.Mid(ic, j, 1) <> " " Then

oa(n) = Microsoft.VisualBasic.Mid(ic, j, 1) : n += 1

Else

n = 0

For k = j + 1 To Len(ic)

ob(n) = Microsoft.VisualBasic.Mid(ic, k, 1) : n += 1

Next

GoTo 1

End If

Next

1:

For j = 1 To 2 Step 1 '若該數未為3未 則須調整個數到相對位置

If oa(j) = 0 Then '第一個數檢查

For k = j To 1 Step -1

oa(k) = oa(k - 1) : oa(k - 1) = 0

Next

End If

If ob(j) = 0 Then '第二個數檢查

For k = j To 1 Step -1

ob(k) = ob(k - 1) : ob(k - 1) = 0

Next

End If

Next

n = 0

For j = 2 To 0 Step -1 '判斷有多少進未

If oa(j) + ob(j) > 9 And j <> 0 Then

oa(j - 1) += 1 : n += 1

ElseIf oa(j) + ob(j) > 9 And j = 0 Then

n += 1

End If

Next

sw.WriteLine(n)

Next

sw.Flush() : sw.Close() : End

End Sub

End Class