**Q001 GCD**

請寫一個程式求出2個數的GCD(最大公因數)

Input and Output

輸入包含好幾筆資料，每筆資料一行，包含2個整數a,b。(0<a,b<10000000)

0 0代表輸入結束。

對每行輸入，輸出這2個數的GCD

Sample Input

12 36

25 24

0 0

Sample Output

GCD(12,36)=12

GCD(25,24)=1

程式碼

Imports System.IO

Public Class Form1

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

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

Dim sw As StreamWriter = fw.CreateText

Dim ia, ib As String

Dim ii(100, 2), a, x As Integer

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

Do

ia = sr.ReadLine

If ia = "0 0" Then Exit Do

For i = 1 To Len(ia)

If Microsoft.VisualBasic.Mid(ia, i, 1) = " " Then

ii(a, 0) = Val(ib)

ib = ""

Else

ib &= Microsoft.VisualBasic.Mid(ia, i, 1)

End If

Next

ii(a, 1) = Val(ib)

ib = ""

a += 1

'ReDim Preserve ii(a, 2)

Loop

For i = 0 To a - 1

If ii(i, 0) > ii(i, 1) Then

x = ii(i, 1)

Else

x = ii(i, 0)

End If

For j = x To 1 Step -1

If ii(i, 0) Mod j = 0 And ii(i, 1) Mod j = 0 Then

ii(i, 2) = j : Exit For

End If

Next

Next

For i = 0 To a - 1

sw.WriteLine("GCD(" & ii(i, 0) & "," & ii(i, 1) & ")=" & ii(i, 2))

Next

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

End Sub

End Class