Imports System.IO

Imports Microsoft.VisualBasic

Imports System.Drawing

Imports System.Drawing.Drawing2D

Imports System.Windows.Forms

Public Class Form1

Dim bitmp As String

Dim pal(256) As Color

Dim path1 As String

Dim x1(9) As Char

Dim time\_pro As Integer

Dim x2(2) As Byte

Dim x As Char

Dim aga As Integer

Dim g As System.Drawing.Graphics

Dim img1 As Image

Dim b(1000, 1000) As Char

Dim a(1000, 1000) As Char

Dim P(1024) As Char

Structure BITMAPFILEHEADER '14 bytes

Dim bfType As Short

Dim bfSize As Integer

Dim bfReserved1 As Short

Dim bfReserved2 As Short

Dim bfOffBits As Integer

End Structure

Structure BITMAPINFOHEADER '40 bytes

Dim biSize As Integer

Dim biWidth As Integer

Dim biHeight As Integer

Dim iplanes As Short

Dim biBitCount As Short

Dim biCompression As Integer

Dim biSizeImage As Integer

Dim biXPelsPerMeter As Integer

Dim biYPelsPerMeter As Integer

Dim biClrUsed As Integer

Dim biClrImportant As Integer

End Structure

'palette, 4 bytes \* 256 = 1024

Structure BITMAPPalette

Dim lngBlue As Byte

Dim lngGreen As Byte

Dim lngRed As Byte

Dim lngReserved As Byte

End Structure

Structure BITMAPFILE

Dim bmfh As BITMAPFILEHEADER

Dim bmih As BITMAPINFOHEADER

Dim pal As BITMAPPalette

End Structure

Dim bitmap1, bitmap2 As BITMAPFILE

Dim headers As Integer

Dim hei, wid, kx, ky As Long

Private Sub Button2\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button2.Click

Dim i1, j1, i, j, k As Long

Dim var As Integer

COM32.Open() 'Open COM port for serial Communication

COM32.ReadTimeout = 10

COM32.WriteTimeout = 10

COM32.Write(x)

'Send the data for processing and receive the processed data

For var = 0 To 1023

If (var Mod 4 = 3) Then

P(var) = ChrW(255)

Else

P(var) = ChrW(Convert.ToInt16(var / 4))

End If

Next

For var = 0 To 255

pal(var) = Color.FromArgb(255, var, var, var)

Next

For i1 = 1 To hei - 2

For j1 = 1 To wid - 2

x1 = a(i1, j1) & a(i1, j1 - 1) & a(i1, j1 + 1) & a(i1 - 1, j1) & a(i1 - 1, j1 - 1) & a(i1 - 1, j1 + 1) & a(i1 + 1, j1) & a(i1 + 1, j1 - 1) & a(i1 + 1, j1 + 1)

COM32.Write(x1)

If ((i1 = hei - 2) And (j1 = wid - 2)) Then

Else

Try

COM32.Read(x2, 1, 1)

b(i1, j1) = ChrW(x2(1))

Catch exp As TimeoutException

b(i1, j1) = a(i1, j1)

End Try

End If

If AscW(b(i1, j1)) = 63 Then

b(i1, j1) = ChrW(255)

End If

Next j1

Next i1

COM32.Close()

FileClose(1)

MsgBox("PRO\_complete")

For i = 0 To wid - 1

b(0, i) = a(0, i)

Next i

For i = 0 To hei - 1

b(i, 0) = (a(i, 0))

Next i

For i = 0 To wid - 1

b(hei - 1, i) = (a(hei - 1, i))

Next i

For i = 0 To hei - 1

b(i, wid - 1) = (a(i, wid - 1))

Next i

FileOpen(2, "result.bmp", OpenMode.Binary)

'FilePut(2, bitmp)

FilePut(2, bitmap1.bmfh)

FilePut(2, bitmap1.bmih)

FilePut(2, Convert.ToString(P))

Dim Res = New Bitmap(bitmap1.bmih.biWidth, bitmap1.bmih.biHeight, System.Drawing.Imaging.PixelFormat.Format24bppRgb)

For i = 0 To wid - 1

For j = 0 To hei - 1

FilePut(2, b(i, j))

Res.SetPixel(j, hei - i - 1, pal((Convert.ToUInt16(b(i, j)) And 255)))

Next j

If (wid Mod 4) > 0 Then

For k = 1 To (4 - wid Mod 4)

FilePut(2, b(i, j))

Res.SetPixel(j, hei - i - 1, pal(Convert.ToUInt16(b(i, j))))

Next k

End If

Next i

FileClose(2)

Res.Save("C:\Users\USER\Desktop\TEST\_IMAGES\Result.bmp")

img1 = Image.FromFile(path1)

PictureBox1.Image = (img1)

MsgBox("COMPLETE...!")

PictureBox2.Image = Res

'PictureBox2.Image = Image.FromFile("result.bmp")

End Sub

Sub Init()

FileOpen(1, path1, OpenMode.Binary)

End Sub

'Function for extracting Header and File Information

Function Read\_header()

FileGet(1, bitmap1.bmfh)

FileGet(1, bitmap1.bmih)

headers = LOF(1) - bitmap1.bmih.biSizeImage ' size of the part from the

Return 0

End Function

Function Next\_init()

Dim i, j As Long

hei = bitmap1.bmih.biHeight

wid = bitmap1.bmih.biWidth

'--------------- get the height and width size

kx = wid

ky = hei

FileClose(1)

Init()

bitmp = Space(headers)

MsgBox("Read SuccessFul...!")

FileGet(1, bitmp) '------ read the part before data

For i = 0 To hei - 1

For j = 0 To wid - 1

FileGet(1, a(i, j)) 'here we read data line by line

Next j

If (wid Mod 4 > 0) Then

For k = 1 To 4 - wid Mod 4

FileGet(1, x)

Next k

End If

Next i

Return (0)

End Function

Private Sub Panel1\_Paint(ByVal sender As System.Object, ByVal e As System.Windows.Forms.PaintEventArgs) Handles Panel1.Paint

End Sub

Private Sub Panel2\_Paint(ByVal sender As System.Object, ByVal e As System.Windows.Forms.PaintEventArgs) Handles Panel2.Paint

End Sub

'to browse image use builtin function OpenFileDialog '

Private Sub Button1\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click

Dim dialog As New OpenFileDialog()

If DialogResult.OK = dialog.ShowDialog Then

TextBox1.Text = dialog.FileName

path1 = dialog.FileName

image\_rd()

End If

End Sub

Function image\_rd()

Init()

Read\_header()

Next\_init()

Return 0

End Function

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

'Form1.

End Sub

Private Sub ProgressBar1\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles ProgressBar1.Click

End Sub

End Class

Class COM32

Friend Shared WriteTimeout As Integer

Shared Property ReadTimeout As Integer

Shared Sub Open()

Throw New NotImplementedException

End Sub

Shared Sub Write(ByVal x As Char)

Throw New NotImplementedException

End Sub

Shared Sub Read(ByVal x2 As Byte(), ByVal p2 As Integer, ByVal p3 As Integer)

Throw New NotImplementedException

End Sub

Shared Sub Close()

Throw New NotImplementedException

End Sub

Shared Function Write(ByVal x1 As Char()) As Integer

Throw New NotImplementedException

End Function

End Class