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'-----Title-----
' File.....vb_stepper_motor1
' Started....2/17/09
' Microcontroller Used:  Microchip Technology PIC16F88
'                          microchip.com

'-----Program Description-----
' Visual Basic.NET program sends control data to a PIC16F88
' which in turn controls a stepper motor.
' PIC microcontroller is programmed in PicBasic Pro.
' PicBasic Pro Code: micro-Engineering Labs, Inc.
'                          melabs.com

'--Free Visual Basic 2008 Express Edition--
' To download VB 2008 Express Edition, see:
' http://www.microsoft.com/Express/VB/

'-----PicBasic Pro Code-----
' For the PicBasic Pro code that interfaces with this VB.NET program,
' see: http://www.cornerstonerobotics.org/code/pbp_vb_stepper_motor1.pdf

'---Properties for Objects on VB Form---
'
'   Object          Property          Setting
'   -----          -
'
'   Label1          Text              "Choose Direction of Rotation"
'   Label2          Text              "Choose Motor Delay in msec"
'   Label3          Text              "(The lower the number, the faster the rpm)"
'   Label4          Text              "Choose the Number of Steps"
'   Label5          Text              "(Duration of Rotation)"
'   RadioButton1    Text              "Clockwise"
'   RadioButton2    Text              "Counterclockwise"
'   Button1         Name              "btnSend"
'   Button1         Text              "Send"
'   NumericUpDown1  Minimum          3
'   NumericUpDown2  Minimum          1
'   NumericUpDown2  Maximum          255

'-----Comments-----
' The byte array, Motor(), has three bytes:
' Motor(0) - The direction of rotation
' Motor(1) - The delay for each step in ms
' Motor(2) - The number of steps

'-----Main Code-----

Imports System
Imports System.IO.Ports
Public Class Stepper_Motor1
    Friend myComPort As New SerialPort

    Private Sub btnSend_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
Handles btnSend.Click
        myComPort.BaudRate = 4800
        myComPort.Parity = Parity.None
        myComPort.DataBits = 8
        myComPort.StopBits = StopBits.One
        myComPort.Open()
        Dim Motor(2) As Byte
        If RadioButton1.Checked = True Then
            Motor(0) = 0

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    Else
        Motor(0) = 1
    End If
    Motor(1) = NumericUpDown1.Value
    Motor(2) = NumericUpDown2.Value
    myComPort.Write(Motor, 0, 3)
    myComPort.Close()
End Sub
End Class
```