Week6 การสื่อสารผ่านสังคม

Aduino code

```
void setup()
{
  Serial.begin(9600);
  pinMode(13,OUTPUT);
  pinMode(2,INPUT);
}

void loop()
{
  byte s;
  int n = Serial.available();
  if (n>0)
  {
    s = Serial.read();
    Serial.write(s);
    if(s=='1') digitalWrite(13,1);
    if(s=='0') digitalWrite(13,0);

    if(s=='3')
  {
  if(digitalRead(2)==1)
  {
    Serial.write('a');
  }
    else
```

```
  {

   Serial.write('b');

  }

 }

}

}
```

Visual studio

```csharp
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using System.Threading;

namespace week6_rs232
{
  public partial class Form1 : Form
    {
    string str1;
    public Form1()
        {
            InitializeComponent();
            timer1.Start();
            serialPort1.Open();
        }

    private void button1_Click(object sender, EventArgs e)
        {
    //serialPort1.Open();
            serialPort1.WriteLine(textBox2.Text);

    Thread.Sleep(500);
    int n = serialPort1.BytesToRead;
    if(n > 0)
            {
                str1 = serialPort1.ReadLine();

                textBox1.Text = str1;
            }
    //serialPort1.Close();
        }
```

```csharp
        private void serialPort1_DataReceived(object sender,
System.IO.Ports.SerialDataReceivedEventArgs e)
        {
    //str1 = serialPort1.ReadLine();
        }

    private void timer1_Tick(object sender, EventArgs e)
        {
            serialPort1.WriteLine("3");

    Thread.Sleep(500);
    int n = serialPort1.BytesToRead;
    if (n > 0)
        {
            str1 = serialPort1.ReadLine();


            textBox1.Text = str1;
    if (str1 == "3a") sw1.BackColor = Color.Red;
    if (str1 == "3b") sw1.BackColor = Color.Gray;
        }
        }

    private void textBox1_TextChanged(object sender, EventArgs e)
        {

        }

    private void textBox2_TextChanged(object sender, EventArgs e)
        {

        }

    private void button2_Click(object sender, EventArgs e)
        {
    // serialPort1.Open();
            serialPort1.WriteLine("1");

    Thread.Sleep(500);
    int n = serialPort1.BytesToRead;
    if (n > 0)
        {
            str1 = serialPort1.ReadLine();

            textBox1.Text = str1;
        }
    // serialPort1.Close();
        }

    private void button3_Click(object sender, EventArgs e)
        {
    //serialPort1.Open();
```

```csharp
            serialPort1.WriteLine("0");

        Thread.Sleep(500);
        int n = serialPort1.BytesToRead;
        if (n > 0)
                {
                    str1 = serialPort1.ReadLine();

                    textBox1.Text = str1;
                }
        //serialPort1.Close();
            }
        }
}
```