

## Week6 การสื่อสารผ่านพอร์ตอนุกรม

```
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.rs222
{
    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();
        }
    }
}
```

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

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

    textBox1.Text = str1;

  }
  //serialPort1.Close();
}
}
```

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');
}

}

}
}
```

