

Week_7

การสื่อสารด้วย Protocall

```
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 week_7protocall
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            serialPort1.Open();
            byte[] data = { 1,0,1};
            serialPort1.Write(data, 0, 3);
            Thread.Sleep(100);
            int n = serialPort1.BytesToRead;
            if (n >=3 )
            {
                byte[] rx_data = new byte[n];
                serialPort1.Read(rx_data, 0,n);
                textBox1.Text = rx_data[0].ToString() + rx_data[1].ToString() +
rx_data[2].ToString();
            }
            serialPort1.Close();
        }

        private void trackBar1_Scroll(object sender, EventArgs e)
        {
        }

        private void trackBar1_ValueChanged(object sender, EventArgs e)
        {
            serialPort1.Open();
            byte[] data = { 2, (byte)trackBar1.Value, (byte)(2 + trackBar1.Value) };
            serialPort1.Write(data, 0, 3);
            Thread.Sleep(100);
            int n = serialPort1.BytesToRead;
```

```
        if (n >= 3)
        {
            byte[] rx_data = new byte[n];
            serialPort1.Read(rx_data, 0, n);
            textBox1.Text = rx_data[0].ToString() + rx_data[1].ToString() +
rx_data[2].ToString();
        }
        serialPort1.Close();
    }
}
```

Arduino

```
void setup()
```

```
{
```

```
    Serial.begin(9600);
```

```
    pinMode(13,OUTPUT);
```

```
    pinMode(2,INPUT);
```

```
}
```

```
void loop()
```

```
{
```

```
    if(Serial.available()>2)
```

```
    {
```

```
        byte fn = Serial.read();
```

```
        byte data = Serial.read();
```

```
byte sum = Serial.read();
```

```
if ( fn == 1)
```

```
{
```

```
data = digitalRead(2);
```

```
Serial.write(1);
```

```
Serial.write(data);
```

```
Serial.write(1+data);
```

```
}
```

```
if(fn == 2)
```

```
{
```

```
if (data == 1) digitalWrite(13,1);
```

```
else digitalWrite(13,0);
```

```
Serial.write(2);
```

```
Serial.write(data);
```

```
Serial.write(2+data);
```

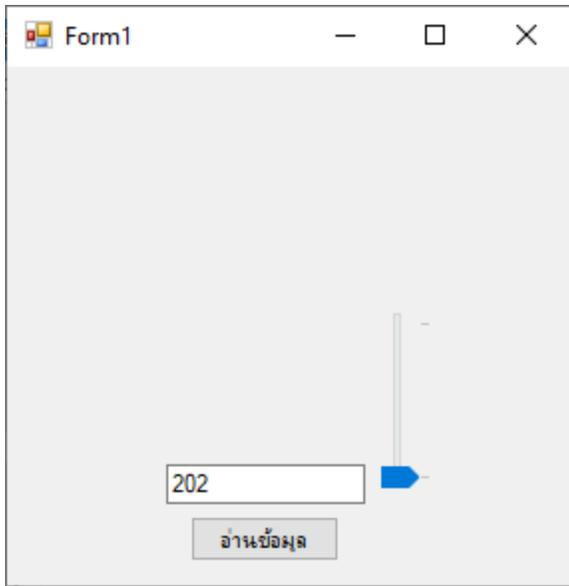
```
}
```

```
Serial.flush();
```

```
}
```

```
}
```

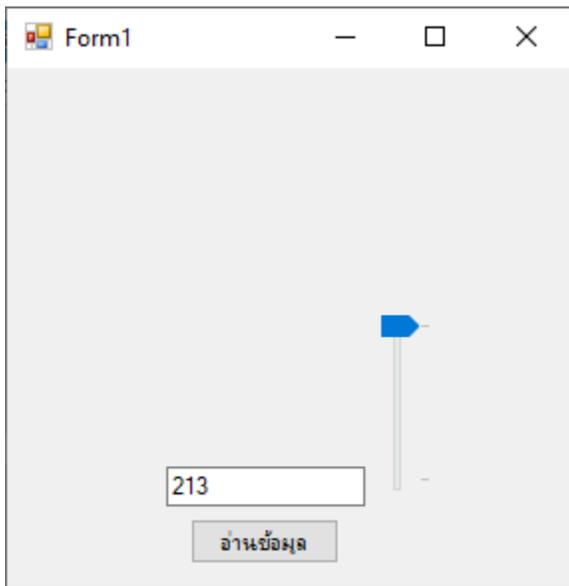
Form1



202

อ่านข้อมูล

Form1



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อ่านข้อมูล