

Week7 การสื่อสารด้วยprotoaol

```
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_7protocol
{
    public partial class Form1:Form
    {
        public Form1()
        {
            InitializeComponent();
        }

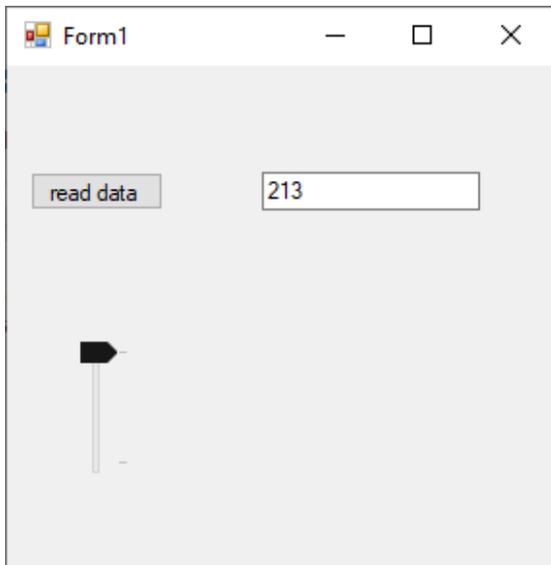
        private void button1_Click(object sender, EventArgs e)
        {
            serialPort1.Open();
            byte[] data = {1,0,1};
            serialPort1.Writedata,0,3);
            Thread.Sleep(100);
            int n = serialPort1.BytesToRead;
            if(n >=3)
            {
                byte[] 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();
        }

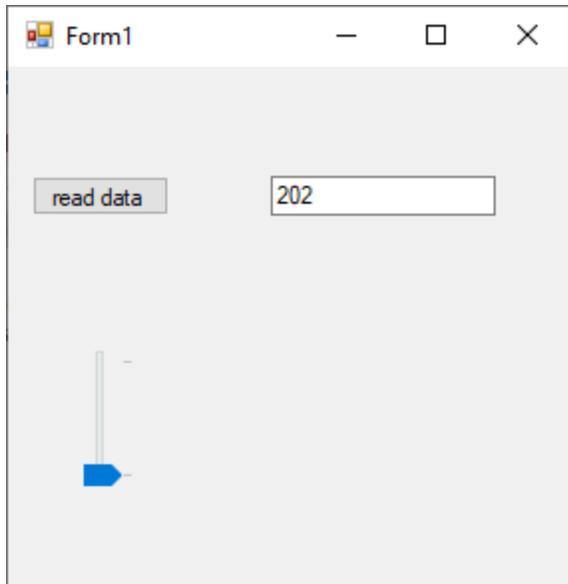
        private void trackBar1_TabIndexChanged(object sender, EventArgs e)
        {
        }

        private void trackBar1_ValueChanged(object sender, EventArgs e)
        {
            serialPort1.Open();
            byte[] data = {2,(byte)trackBar1.Value,(byte)(2 + trackBar1.Value )};
            serialPort1.Writedata, 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();
}
}
```

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





arduino

```
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();  
}  
  
}
```