

1.

; .NET CLR System.IO I/O .

,
Stream Stream ,
Stream .

1-1. Stream (Stream)

FileStream	.
MemoryStream	.
NetworkStream	.
BufferedStream	

1-2. /

; StreamReader, StreamWriter, BinaryReader, BinaryWriter, XMLTextReader...

1-3. Stream utility class

; File class, TCPClient, TCPListener class..

1-4.

- file open : File.OpenText();
- file read : ReadLine() , ReadToEnd()
* ReadLine() , ReadToEnd()
string .
- 가 : Peek()
- : Close()

fileopenTest.cs

```
using System;
using System.IO;
class MainClass
{
public static void Main() {
StreamReader sr;
try {
sr = File.OpenText("test.txt");
```

```
//sr= new
StreamReader(File.OpenText("test.txt").BaseStream, System.Text.Encoding.Default);
} catch (System.IO.FileNotFoundException e) {
Console.WriteLine("Exception{0}", e.ToString());
return;
}
int nCount=0;
//
while(sr.Peek() !=-1){
string input = sr.ReadLine();
Console.WriteLine("{0},{1}", nCount++, input);
}
sr.Close();
}
```

```
F:\C#\consoleSample\winsi>type test.txt
박형범 하하하 hello
F:\C#\consoleSample\winsi>csc fileopen.cs
Microsoft (R) Visual C# Compiler Version 7.00.9030 [CLR version 1.00.2204]
Copyright (C) Microsoft Corp 2000. All rights reserved.

F:\C#\consoleSample\winsi>fileopen
0,??? ??? hello
F:\C#\consoleSample\winsi>_
```

(//sr= new StreamReader(File.OpenText("test.txt").Bas.....)

가

. System.Text.Encoding.Default .

```
F:\C#\consoleSample\winsi>csc fileopen.cs
Microsoft (R) Visual C# Compiler Version 7.00.9030 [CLR version 1.00.2204.21]
Copyright (C) Microsoft Corp 2000. All rights reserved.

F:\C#\consoleSample\winsi>fileopen
0, 박형범 하하하 hello
F:\C#\consoleSample\winsi>_
```

1-5.

```
-          : File.CreateText(          );
-          : WriteLine( "          ");
-          : Close();
```

```
F:\C#\consoleSample\winsi>csc filesave.cs
Microsoft (R) Visual C# Compiler Version 7.00.9030 [CLR version 1.00.2204.
Copyright (C) Microsoft Corp 2000. All rights reserved.

F:\C#\consoleSample\winsi>type test.txt
박형범 하하하 hello
F:\C#\consoleSample\winsi>filesave

F:\C#\consoleSample\winsi>type test.txt
?똥똥??뽕뽕 ???? 똥똥 ?뽕뽕뽕뽕??
```

```
F:\C#\consoleSample\winsi>csc filesave.cs
Microsoft (R) Visual C# Compiler Version 7.00.9030 [CLR version 1.00.2204.
Copyright (C) Microsoft Corp 2000. All rights reserved.

F:\C#\consoleSample\winsi>filesave

F:\C#\consoleSample\winsi>type t.txt
파일에 정말 저장이 되는구나!!!
F:\C#\consoleSample\winsi>_
```

)



```
namespace FileOpenTest
{
    using System;
        using System.IO;
    using System.Drawing;
    using System.Collections;
    using System.ComponentModel;
    using System.Windows.Forms;
    using System.Data;

    /// <summary>
    ///     Summary description for Form1.
    /// </summary>
    public class Form1 : System.Windows.Forms.Form
    {
        /// <summary>
        ///     Required designer variable.
    }
```

```
/// </summary>
private System.ComponentModel.Container components;
    private System.Windows.Button button4;
    private System.Windows.TextBox textBox4;
    private System.Windows.Button button3;
    private System.Windows.TextBox textBox3;
    private System.Windows.Button button2;
    private System.Windows.TextBox textBox2;
    private System.Windows.Button button1;
    private System.Windows.TextBox textBox1;
    private StreamReader sr;
    private StreamWriter sw;
public Form1()
{
    //
    // Required for Windows Form Designer support
    //
    InitializeComponent();

    //
    // TODO: Add any constructor code after InitializeComponent call
    //
}

/// <summary>
///     Clean up any resources being used.
/// </summary>
public override void Dispose()
{
    base.Dispose();
    components.Dispose();
}

/// <summary>
///     Required method for Designer support - do not modify
///     the contents of this method with the code editor.

```

```
/// </summary>
private void InitializeComponent()
{
    this.components = new System.ComponentModel.Container ();
    this.button1 = new System.Windows.Forms.Button ();
    this.button3 = new System.Windows.Forms.Button ();
    this.button2 = new System.Windows.Forms.Button ();
    this.button4 = new System.Windows.Forms.Button ();
    this.textBox3 = new System.Windows.Forms.TextBox ();
    this.textBox2 = new System.Windows.Forms.TextBox ();
    this.textBox4 = new System.Windows.Forms.TextBox ();
    this.textBox1 = new System.Windows.Forms.TextBox ();
    //@this.TrayHeight = 0;
    //@this.TrayLargelcon = false;
    //@this.TrayAutoArrange = true;
    button1.Location = new System.Drawing.Point (64, 176);
    button1.Size = new System.Drawing.Size (160, 32);
    button1.TabIndex = 1;
    button1.Text = "          ";
    button1.Click += new System.EventHandler (this.button1_Click);
    button3.Location = new System.Drawing.Point (64, 384);
    button3.Size = new System.Drawing.Size (168, 32);
    button3.TabIndex = 5;
    button3.Text = "UTF-8          ";
    button3.Click += new System.EventHandler (this.button3_Click);
    button2.Location = new System.Drawing.Point (352, 176);
    button2.Size = new System.Drawing.Size (168, 32);
    button2.TabIndex = 3;
    button2.Text = "          ";
    button2.Click += new System.EventHandler (this.button2_Click);
    button4.Location = new System.Drawing.Point (352, 384);
    button4.Size = new System.Drawing.Size (160, 32);
    button4.TabIndex = 7;
    button4.Text = "ANSI          ";
    button4.Click += new System.EventHandler (this.button4_Click);
    textBox3.Location = new System.Drawing.Point (48, 240);
```

```
        textBox3.Multiline = true;
        textBox3.TabIndex = 4;
        textBox3.Size = new System.Drawing.Size (200, 120);
        textBox2.Location = new System.Drawing.Point (320, 32);
        textBox2.Multiline = true;
        textBox2.ScrollBars = System.Windows.Forms.ScrollBars.Both;
        textBox2.TabIndex = 2;
        textBox2.Size = new System.Drawing.Size (224, 128);
        textBox4.Location = new System.Drawing.Point (320, 240);
        textBox4.Multiline = true;
        textBox4.ScrollBars = System.Windows.Forms.ScrollBars.Both;
        textBox4.TabIndex = 6;
        textBox4.Size = new System.Drawing.Size (224, 128);
        textBox1.Location = new System.Drawing.Point (40, 32);
        textBox1.Multiline = true;
        textBox1.ScrollBars = System.Windows.Forms.ScrollBars.Both;
        textBox1.TabIndex = 0;
        textBox1.Size = new System.Drawing.Size (216, 128);
        this.Text = "Form1";
        this.AutoScaleBaseSize = new System.Drawing.Size (6, 14);
        this.ClientSize = new System.Drawing.Size (592, 427);
        this.Controls.Add (this.button4);
        this.Controls.Add (this.textBox4);
        this.Controls.Add (this.button3);
        this.Controls.Add (this.textBox3);
        this.Controls.Add (this.button2);
        this.Controls.Add (this.textBox2);
        this.Controls.Add (this.button1);
        this.Controls.Add (this.textBox1);
    }

    // ANSI
    protected void button4_Click (object sender, System.EventArgs e)
    {
        SW = new
StreamWriter(File.CreateText("test.txt").BaseStream, System.Text.Encoding.Default);
```

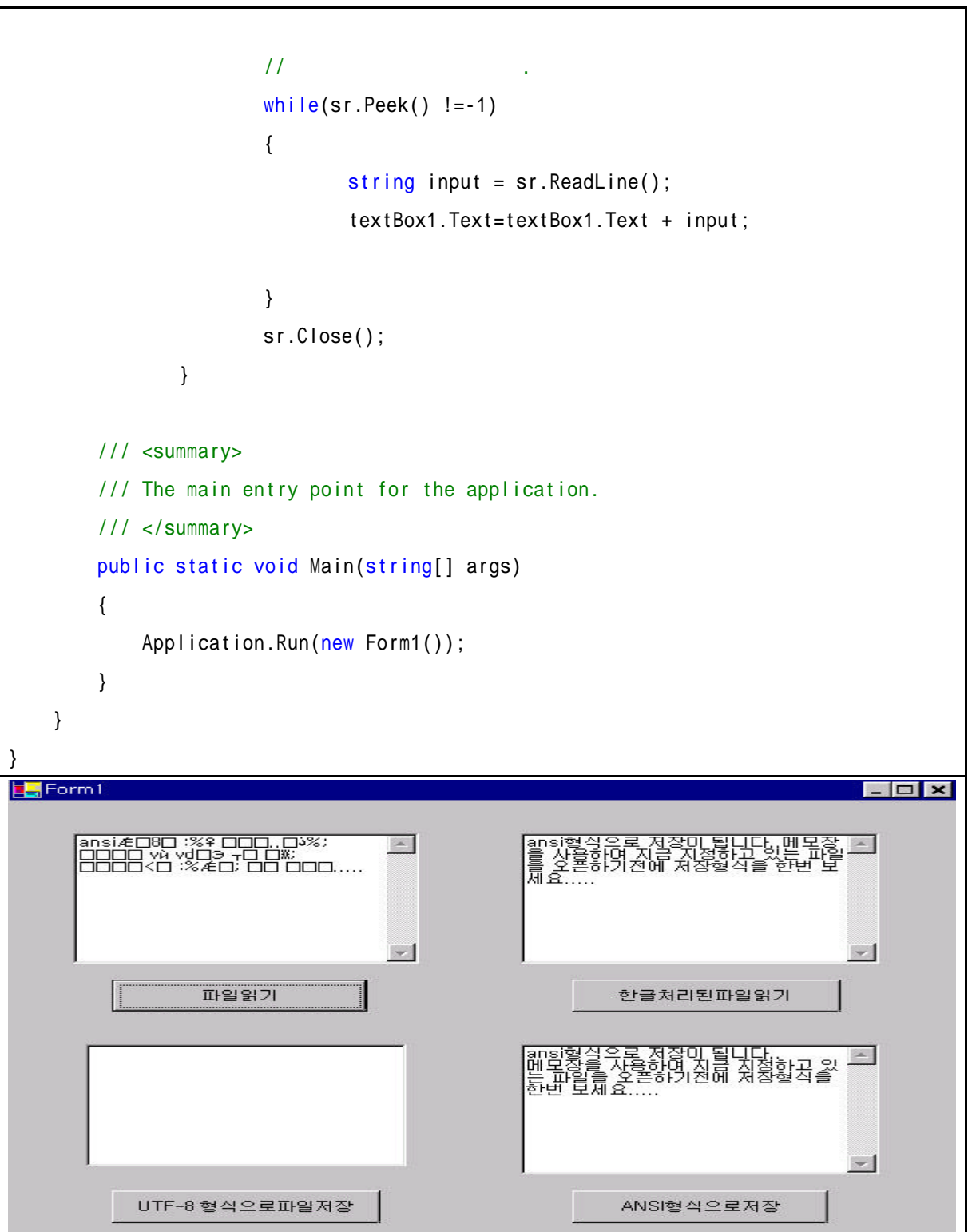
```
        sw.WriteLine(textBox4.Text);
        sw.Close();

    }
    // UTF-8
    protected void button3_Click (object sender, System.EventArgs e)
    {
        //
        StreamWriter sw = File.CreateText("./test.txt");
        //
        sw.WriteLine(textBox3.Text);
        //
        sw.Close();
    }

    //
    protected void button2_Click (object sender, System.EventArgs e)
    {
        sr = new
StreamReader(File.OpenText("test.txt").BaseStream, System.Text.Encoding.Default);
        while(sr.Peek() != -1)
        {
            string input = sr.ReadLine();
            textBox2.Text=textBox2.Text + input;
        }
        sr.Close();
    }

    //
    //
    protected void button1_Click (object sender, System.EventArgs e)
    {

        sr = File.OpenText("test.txt");
```

; ansi

.. UTF-8 ()

..