double dSutja\_Stored = 0;//숫자를 잠시 저장하기 위한 변수

string sOperation\_Stored = "";//연산자를 잠시 저장하기 위한 변수

Boolean bClear\_Flag = false;//true:한번지우고 숫자표시, False : 그냥 표시

public Form1()

{

InitializeComponent();

}

private void button1\_Click(object sender, EventArgs e)

{

if (bClear\_Flag == true)

{

textBox1.Text = "";

bClear\_Flag = false;

}

textBox1.AppendText("1");

}

Boolean bJjeom\_Flag = false;//true:점찍힘, false:점찍기전

private void button12\_Click(object sender, EventArgs e)

{

if (bJjeom\_Flag == false)

{

if (textBox1.Text == "")

{

textBox1.Text = "0";

}

textBox1.AppendText(".");

bJjeom\_Flag = true;

}

}

private void button13\_Click(object sender, EventArgs e)

{

textBox1.Text = "";

bJjeom\_Flag = false;

dSutja\_Stored = 0;

sOperation\_Stored = "";

bJjeom\_Flag = false;

}

private void button14\_Click(object sender, EventArgs e)

{

if (textBox1.Text != "")

{

if (textBox1.Text.Substring(textBox1.TextLength - 1) == ".")

{

bJjeom\_Flag = false;

}

if (textBox1.Text == "0.")

{

textBox1.Text = textBox1.Text.Remove(textBox1.TextLength - 1);

}

textBox1.Text = textBox1.Text.Remove(textBox1.TextLength - 1); //Substring

}

}

public void Operation()

{

if (sOperation\_Stored == "+")

textBox1.Text = (dSutja\_Stored + double.Parse(textBox1.Text)).ToString();

if (sOperation\_Stored == "-")

textBox1.Text = (dSutja\_Stored - double.Parse(textBox1.Text)).ToString();

if (sOperation\_Stored == "x")

textBox1.Text = (dSutja\_Stored \* double.Parse(textBox1.Text)).ToString();

if (sOperation\_Stored == "/")

textBox1.Text = (dSutja\_Stored / double.Parse(textBox1.Text)).ToString();

if (sOperation\_Stored == "^")

textBox1.Text = Math.Pow(dSutja\_Stored, double.Parse(textBox1.Text)).ToString();

if (sOperation\_Stored == "%")

textBox1.Text = (dSutja\_Stored % double.Parse(textBox1.Text)).ToString();

}

private void button21\_Click(object sender, EventArgs e)

{//x^

if (textBox1.Text != "")

{

//double x = double.Parse(textBox1.Text);

//textBox1.Text = (x\*x).ToString();

textBox1.Text = Math.Pow(double.Parse(textBox1.Text),2).ToString();

bJjeom\_Flag = false;

bClear\_Flag = true;

dSutja\_Stored = 0;

sOperation\_Stored = "";

}

}

public double Factorial(double n)

{//재귀함수:Recursive

if (n == 1)

return 1;

else

return Factorial(n - 1) \* n;

}

private void button31\_Click(object sender, EventArgs e)

{//n!

if (textBox1.Text != "")

{

/\*double dFac, dSum = 1;

/\*dFac = double.Parse(textBox1.Text);

/\*for (int i = 1; i <= dFac; i++)

dSum = dSum \* i;\*/

/\*for (double i = dFac; i >= 1; i--)

dSum = dSum \* i;

textBox1.Text = dSum.ToString();\*/

textBox1.Text = Factorial(double.Parse(textBox1.Text)).ToString();

}

}

private void button27\_Click(object sender, EventArgs e)

{//x^y

if (textBox1.Text == "")

{

goto Exit;

}

if (sOperation\_Stored != "")

{

Operation();

}

dSutja\_Stored = double.Parse(textBox1.Text);

sOperation\_Stored = "^";

bJjeom\_Flag = false;

bClear\_Flag = true;

Exit:;

}

private void button22\_Click(object sender, EventArgs e)

{//+/-

textBox1.Text = (-(double.Parse(textBox1.Text))).ToString();

}

private void button24\_Click(object sender, EventArgs e)

{//파이

textBox1.Text = Math.PI.ToString();

bJjeom\_Flag = false;

bClear\_Flag = true;

}

private void button29\_Click(object sender, EventArgs e)

{//\x\

if (textBox1.Text != "")

{

textBox1.Text = Math.Abs(double.Parse(textBox1.Text)).ToString();

}

}

private void button28\_Click(object sender, EventArgs e)

{//sin

if (textBox1.Text != "")

{

textBox1.Text = Math.Sin(double.Parse(textBox1.Text)\*Math.PI/180).ToString();

}

}

private void button32\_Click(object sender, EventArgs e)

{//root

if (textBox1.Text != "")

{

textBox1.Text = Math.Sqrt(double.Parse(textBox1.Text)).ToString();

}

}

private void 공학계산기ToolStripMenuItem\_Click(object sender, EventArgs e)

{

groupBox1.Show();

this.Text = "공학 계산기";

this.Width = 765;

this.Height = 430;

textBox1.Width = 725;

일반계산기ToolStripMenuItem.Checked = false;

공학계산기ToolStripMenuItem.Checked = true;

label1.Text = "This Calculator is maded by K.J.O in Dept. Software Engineering of Seoil University!";

}

private Form4 get\_Help;

private void 계산기사용법ToolStripMenuItem\_Click(object sender, EventArgs e)

{

get\_Help = new Form4();

get\_Help.Owner = this;

get\_Help.Show();

this.Hide();

}

private void 개발환경ToolStripMenuItem\_Click(object sender, EventArgs e)

{

MessageBox.Show("운영체제 : Windows 10 Enterprise LTSC" + "\r\n\n" + "개발도구 : Microsoft Visual Studio Commuinity" + "Professional 2019", "[ 개발환경 ]");

}