Tutorial - 8:

1. **Design an application which has One Tree View control to display State and its district information. It provides the facility to user to Clear, Count, Expand, Collapse, Add Root, Add as Child Root, Selected Remove.**

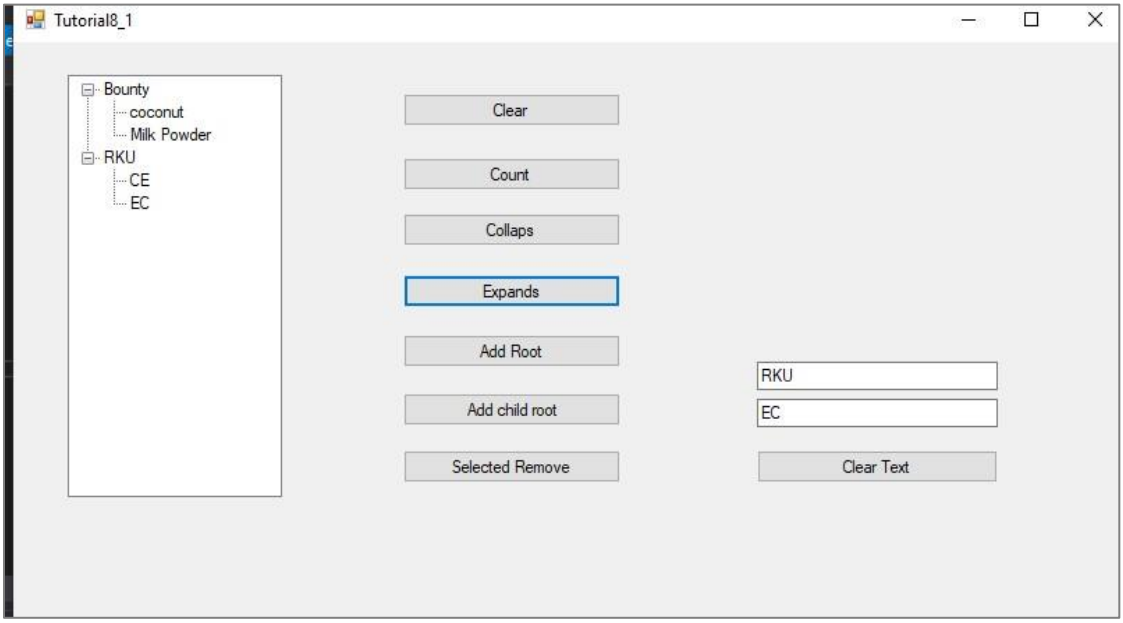
CODE:

```
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;

namespace Tutorial_8
{
    public partial class Tu8_1 : Form
    {
        public Tu8_1()
        {
            InitializeComponent();
        }

        private void Button5_Click(object sender, EventArgs e)
```

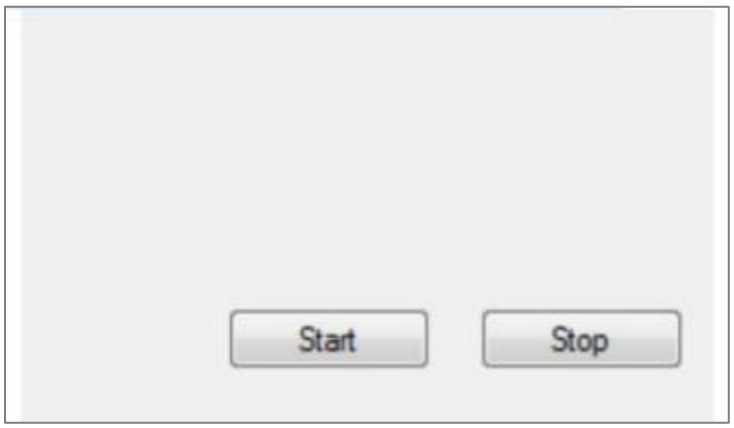
```
{
    treeView1.Nodes.Add(textBox1.Text);
}

private void Button1_Click(object sender, EventArgs e)
{
    treeView1.Nodes.Clear();
}

private void Button2_Click(object sender, EventArgs e)
{
    for (int i = 0; i < treeView1.Nodes.Count; i++)
    {
        MessageBox.Show("Nodes are : " + treeView1.Nodes.Count);
    }
}

private void Button3_Click(object sender, EventArgs e)
{
    treeView1.CollapseAll();
}

private void Button4_Click(object sender, EventArgs e)
{
    treeView1.ExpandAll();
}

private void Button6_Click(object sender, EventArgs e)
{
    treeView1.SelectedNode.Nodes.Add(textBox2.Text);
}

private void Button7_Click(object sender, EventArgs e)
{
    treeView1.SelectedNode.Remove();
}

private void Button8_Click(object sender, EventArgs e)
{
    textBox1.Text = "";
    textBox2.Text = "";
```

```
        }
    }
}
```

Output:


Tutorial8_1
Bounty
coconut
Milk Powder
RKU
CE
EC
Clear
Count
Collaps
Expands
Add Root
Add child root
Selected Remove
RKU
EC
Clear Text

2. Design an application which works like traffic signal.



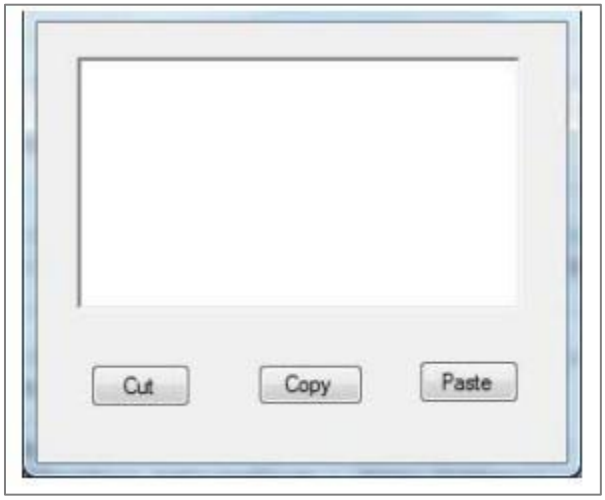
CODE:

```
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;

namespace Tutorial_8
{
    public partial class Tu8_2 : Form
    {
        public Tu8_2()
        {
            InitializeComponent();
        }

        private void Timer1_Tick(object sender, EventArgs e)
        {
            int num = Convert.ToInt32(label1.Text);
            num = num + 1;
            label1.Text = Convert.ToString(num);
        }
```

```
        private void Button1_Click(object sender, EventArgs e)
        {
            timer1.Start();
        }

        private void Button2_Click(object sender, EventArgs e)
        {
            timer1.Stop();
        }
    }
}
```

Output:

3. **Design an application like follow which provide the facility to user for cut, copy and paste.**



CODE:

```
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;

namespace Tutorial_8
{
    public partial class Tu8_3 : Form
    {
        public Tu8_3()
        {
            InitializeComponent();
        }

        private void Button1_Click(object sender, EventArgs e)
        {
            Clipboard.SetDataObject(richTextBox1.SelectedText);
            richTextBox1.SelectedText = "";
```

```
        }

        private void Button2_Click(object sender, EventArgs e)
        {
            Clipboard.SetDataObject(richTextBox1.SelectedText);
        }

        private void Button3_Click(object sender, EventArgs e)
        {
            IDataObject iData = default(IDataObject);
            iData = Clipboard.GetDataObject();
            if ((iData.GetDataPresent(DataFormats.Text)))
            {
                richTextBox1.SelectedText =
iData.GetData(DataFormats.Text).ToString();
            }
            else
            {
                richTextBox1.SelectedText = " ";
            }
        }
    }
}
```

Output: