

```
1 using System.Drawing;
2 using System.Windows.Forms;
3 using CASP_Standalone_Implementation.Src;
4 using Newtonsoft.Json.Linq;
5 using System.Collections.Generic;
6 using System;
7 using System.Linq;
8 using System.Drawing.Drawing2D;
9
10 namespace CASP_Standalone_Implementation.Forms
11 {
12     public partial class CASP_PrintForm : CASP_OutputForm
13     {
14         class Tree
15         {
16             public string Title;
17             public string Data;
18
19             public List<Tree> Children = new List<Tree>();
20
21             public bool isLeaf
22             {
23                 get
24                 {
25                     return Children.Count == 0;
26                 }
27             }
28         }
29
30         public CASP_PrintForm()
31         {
32             InitializeComponent();
33         }
34
35         public override void Set_CASP_Output(JObject CASP_Response)
36         {
37             Tree t = Parse((JObject)CASP_Response["Data"]["ParseTree"]);
38
39             TreeView.Nodes.Add(Display(t));
40
41             Display(t);
42         }
43
44         TreeNode Display(Tree t)
45         {
46             TreeNode node = new TreeNode();
47             node.Text = t.Title;
48
49             if (!t.isLeaf)
50             {
51                 for (int i = 0; i < t.Children.Count; i++)
52                     node.Nodes.Add(Display(t.Children[i]));
53             }
54             else
55             {
56                 node.Nodes.Add(new TreeNode(t.Data));
57             }
58
59             node.Expand();
60
61             return node;
62         }
63
64         Tree Parse(JObject response)
65         {
66             Tree newTree = new Tree();
```

```
67     JArray children = (JArray)response["Children"];
68
69     newTree.Title = (string)response["Title"];
70     newTree.Data = (string)response["Data"];
71
72     for (int i = 0; i < children.Count; i++)
73     {
74         newTree.Children.Add(Parse((JObject)children[i]));
75     }
76
77     return newTree;
78 }
79
80 }
81 }
```