

Practical no 2**AIM:** Setup DirectX 11, Window Framework and Initialize Direct3D Device**Steps:-**

1. Create a new project and select a windows form application(.Net Framework 2.0-3.5).
2. Right click on the properties → click on open → click build → select platform target → x86 or add new
3. Click on view code on form 1(design) or press F7.
4. Go to the solution explorer → right click on project name → select add reference .
5. Click on browse and add the required dll files.
6. Code the required files.
7. Add the paint method for changing the appearance .
8. Change the window name and icon if possible.
9. Disable the Exception Settings option such as LoaderLock.
10. Run the app.

Code:-**Program.cs file**

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Windows.Forms;

namespace WindowsFormsApp5
{
    static class Program
    {
        /// <summary>
        /// The main entry point for the application.
        /// </summary>
        [STAThread]
        static void Main()
        {
            Application.EnableVisualStyles();
            Application.SetCompatibleTextRenderingDefault(false);
            Application.Run(new Form1());
        }
    }
}
```

Form1.cs file

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Windows.Forms;
using Microsoft.DirectX.Direct3D;

namespace WindowsFormsApp5
{
    public partial class Form1 : Form
    {
        Microsoft.DirectX.Direct3D.Device device;
        public Form1()
        {
            InitializeComponent();
            InitDevice();
        }

        private void InitDevice()
        {
            PresentParameters pp = new PresentParameters();
            pp.Windowed = true;
            pp.SwapEffect = SwapEffect.Discard;
            device = new Device(0, DeviceType.Hardware, this, CreateFlags.HardwareVertexPro-
cessing, pp);

        }

        public void Render()
        {
            device.Clear(ClearFlags.Target, Color.RoyalBlue, 0, 1);
            device.Present();
        }

        private void Form1_Paint(object sender, PaintEventArgs e)
        {
            Render();
        }
    }
}
```

Output

