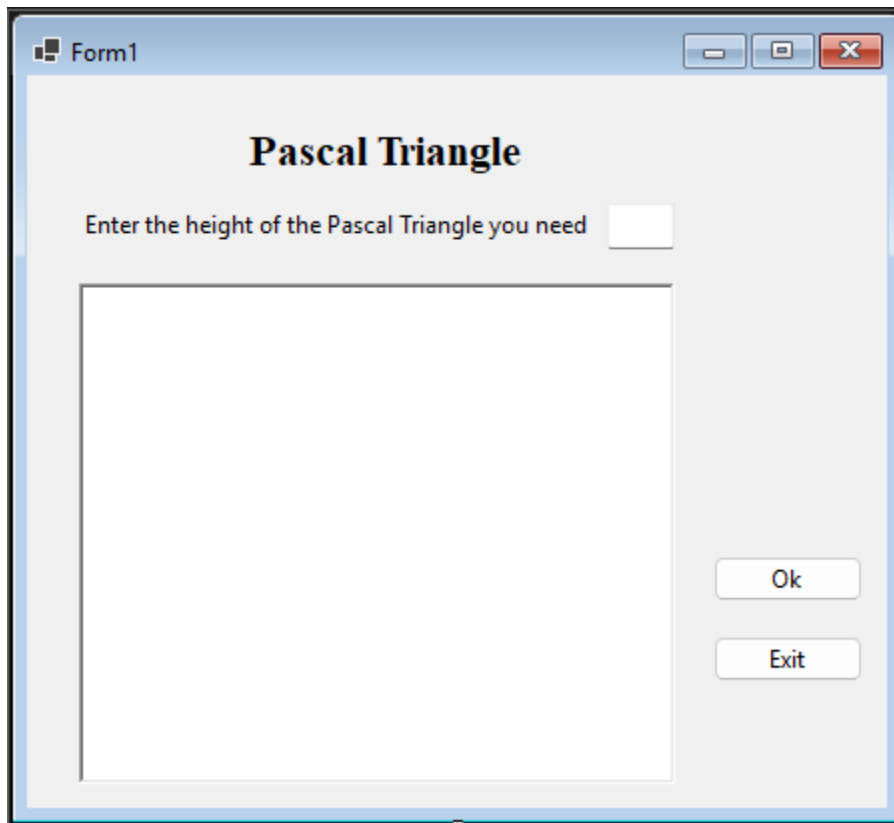


Practical Guide 06 – Part II

I.



The screenshot shows a Windows application window titled "Form1". Inside the window, the title "Pascal Triangle" is centered at the top. Below the title, there is a text label "Enter the height of the Pascal Triangle you need" followed by a small text input box. In the center of the window is a large, empty rectangular area, likely a Rich Text Box, intended for displaying the Pascal Triangle. At the bottom right of the window, there are two buttons: "Ok" and "Exit".

III.

```
namespace PascalTriangle
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void btnExit_Click(object sender, EventArgs e)
        {
            this.Close();
        }

        private void btnOk_Click(object sender, EventArgs e)
        {
            richTextBox1.Text = "";
            try
            {
                int length = int.Parse(txtNumber.Text);
                long[][] triangle = new long[length + 1][];
                for (int row = 0; row < length; row++)
                {
                    triangle[row] = new long[row + 1];
                }
                // Calculate the Pascal's triangle
                triangle[0][0] = 1;
                for (int row = 0; row < length - 1; row++)
                {
                    for (int col = 0; col <= row; col++)
```

```
        {
            triangle[row + 1][col] += triangle[row][col];
            triangle[row + 1][col + 1] += triangle[row][col];
        }
    }
    // Print the Pascal's triangle
    for (int row = 0; row < length; row++)
    {
        richTextBox1.Text = richTextBox1.Text + "".PadLeft((length - row) * 2);
        for (int col = 0; col <= row; col++)
        {
            richTextBox1.Text = richTextBox1.Text + triangle[row][col];
        }
        richTextBox1.Text = richTextBox1.Text + Environment.NewLine;
    }
}
catch (FormatException)
{
    MessageBox.Show("Please enter a number to the length");
}
}
}
```

IV.

Form1

Pascal Triangle

Enter the height of the Pascal Triangle you need 5

1
11
121
1331
14641

Ok
Exit