Lab 3:

Code:

using System;

using System.Text.RegularExpressions;

using System.Windows.Forms;

namespace CCLab03

{

public partial class Form1 : Form

{

public Form1()

{

InitializeComponent();

}

// Task 1: Floating Point Numbers with Length <= 6

private void btnTask1\_Click(object sender, EventArgs e)

{

string input = txtInput.Text;

string regex = @"^\d{1,6}(\.\d{1,6})?$";

lblResult.Text = Regex.IsMatch(input, regex)

? "Valid Floating Point Number"

: "Invalid Floating Point Number";

}

// Task 2: Scientific Notation Numbers

private void btnTask2\_Click(object sender, EventArgs e)

{

string input = txtInput.Text;

string regex = @"^\d+e[-+]?\d+$";

MatchCollection matches = Regex.Matches(input, regex);

dataGridView1.Rows.Clear();

foreach (Match match in matches)

{

dataGridView1.Rows.Add(match.Value);

}

}

// Task 3: Words Starting with 't' or 'm'

private void btnTask3\_Click(object sender, EventArgs e)

{

string input = txtInput.Text;

string regex = @"\b[tT|mM]\w\*\b";

MatchCollection matches = Regex.Matches(input, regex);

dataGridView1.Rows.Clear();

foreach (Match match in matches)

{

dataGridView1.Rows.Add(match.Value);

}

}

}

}

Output:







