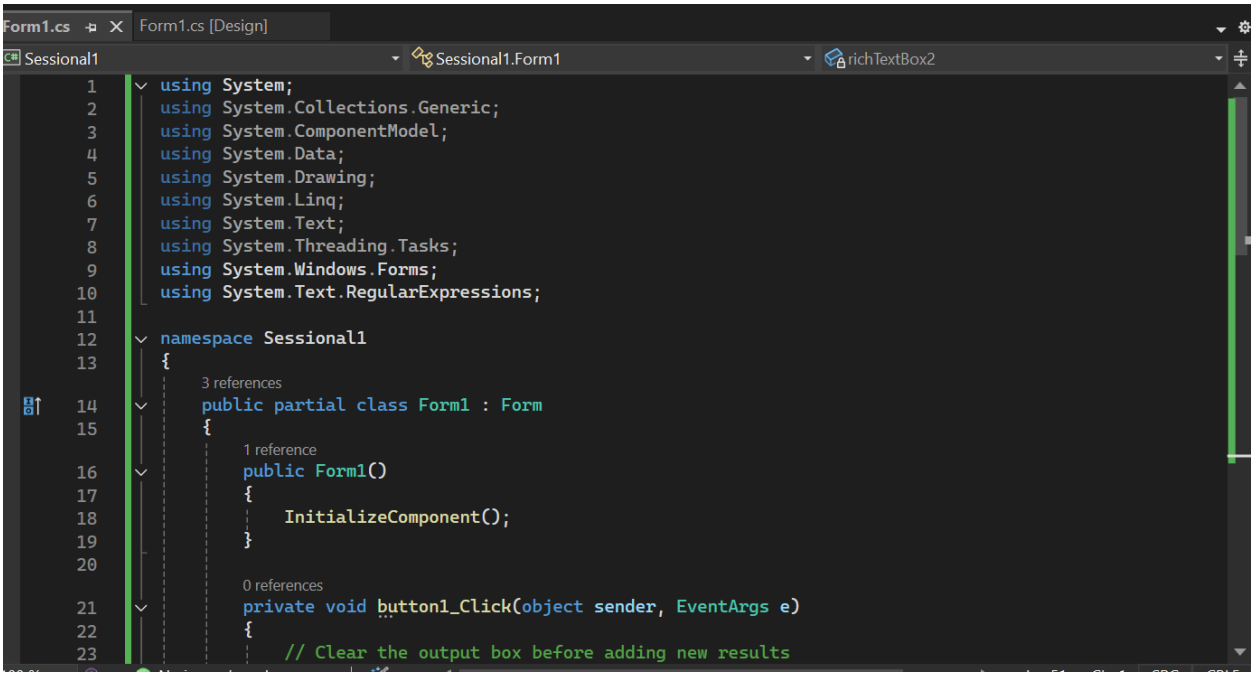
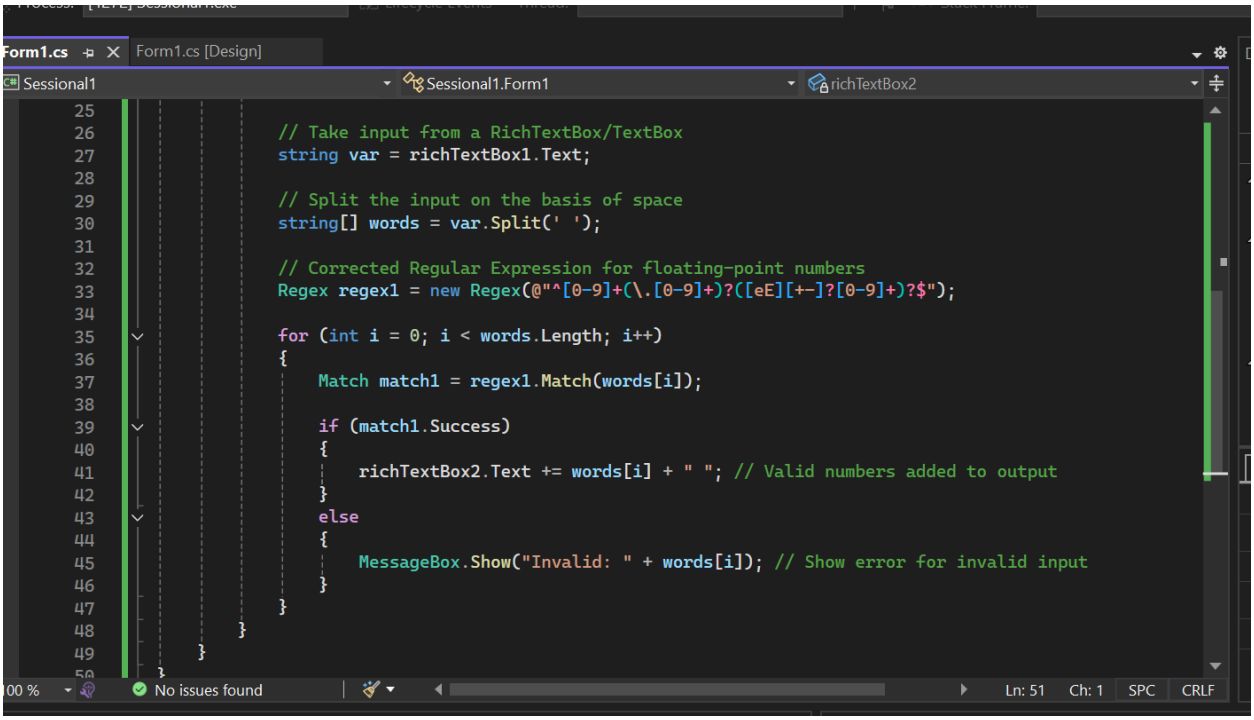
LAB NO 3:

Activity 1:

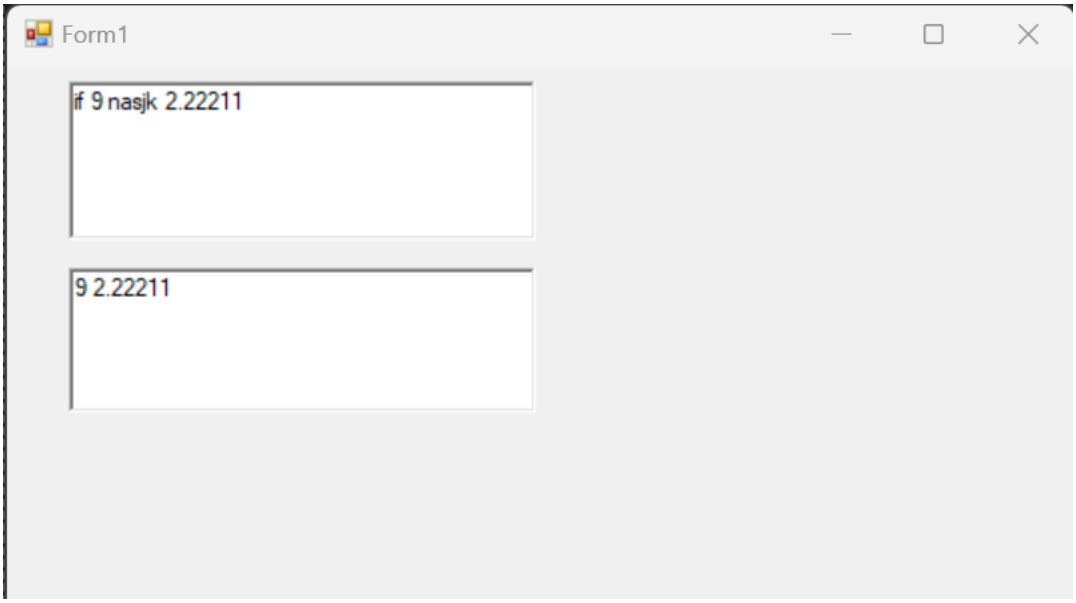


```
Form1.cs | Form1.cs [Design]
Sessional1 | Sessional1.Form1 | richTextBox2
1  using System;
2  using System.Collections.Generic;
3  using System.ComponentModel;
4  using System.Data;
5  using System.Drawing;
6  using System.Linq;
7  using System.Text;
8  using System.Threading.Tasks;
9  using System.Windows.Forms;
10 using System.Text.RegularExpressions;
11
12 namespace Sessional1
13 {
       3 references
14     public partial class Form1 : Form
15     {
           1 reference
16         public Form1()
17         {
18             InitializeComponent();
19         }
20
           0 references
21         private void button1_Click(object sender, EventArgs e)
22         {
23             // Clear the output box before adding new results
```

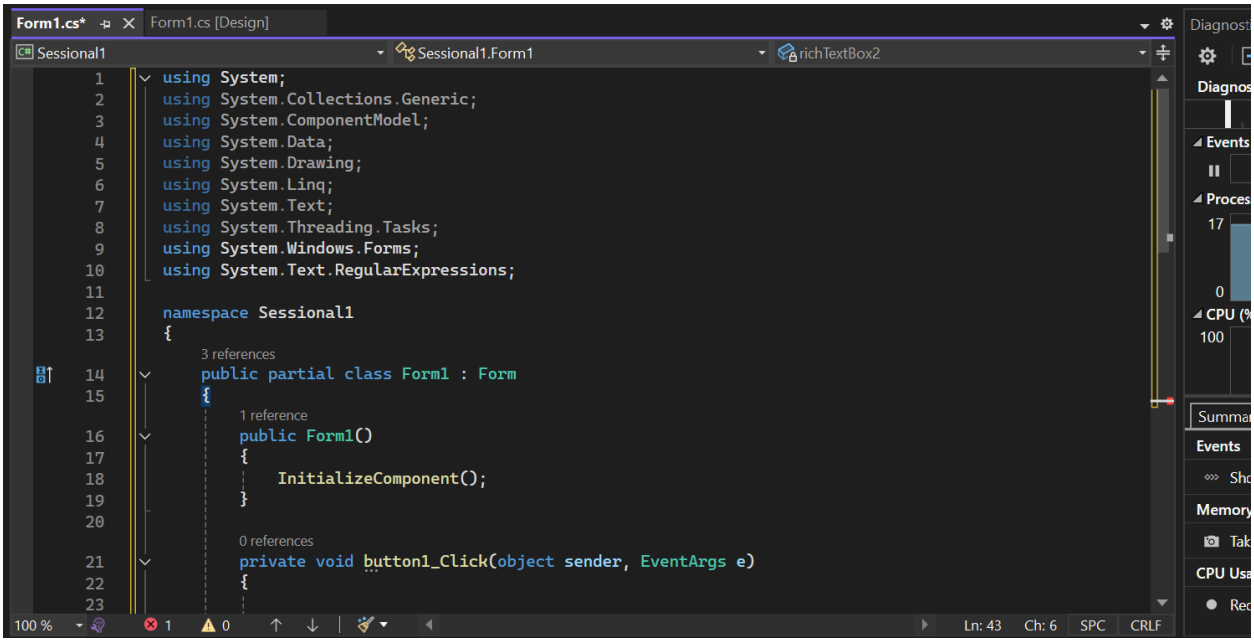


```
Form1.cs | Form1.cs [Design]
Sessional1 | Sessional1.Form1 | richTextBox2
25             // Take input from a RichTextBox/TextBox
26             string var = richTextBox1.Text;
27
28             // Split the input on the basis of space
29             string[] words = var.Split(' ');
30
31             // Corrected Regular Expression for floating-point numbers
32             Regex regex1 = new Regex(@"^[0-9]+(\.[0-9]+)?([eE][+-]?[0-9]+)?$");
33
34             for (int i = 0; i < words.Length; i++)
35             {
36                 Match match1 = regex1.Match(words[i]);
37
38                 if (match1.Success)
39                 {
40                     richTextBox2.Text += words[i] + " "; // Valid numbers added to output
41                 }
42                 else
43                 {
44                     MessageBox.Show("Invalid: " + words[i]); // Show error for invalid input
45                 }
46             }
47         }
48     }
49 }
100 % | No issues found | Ln: 51 | Ch: 1 | SPC | CRLF
```

Output:

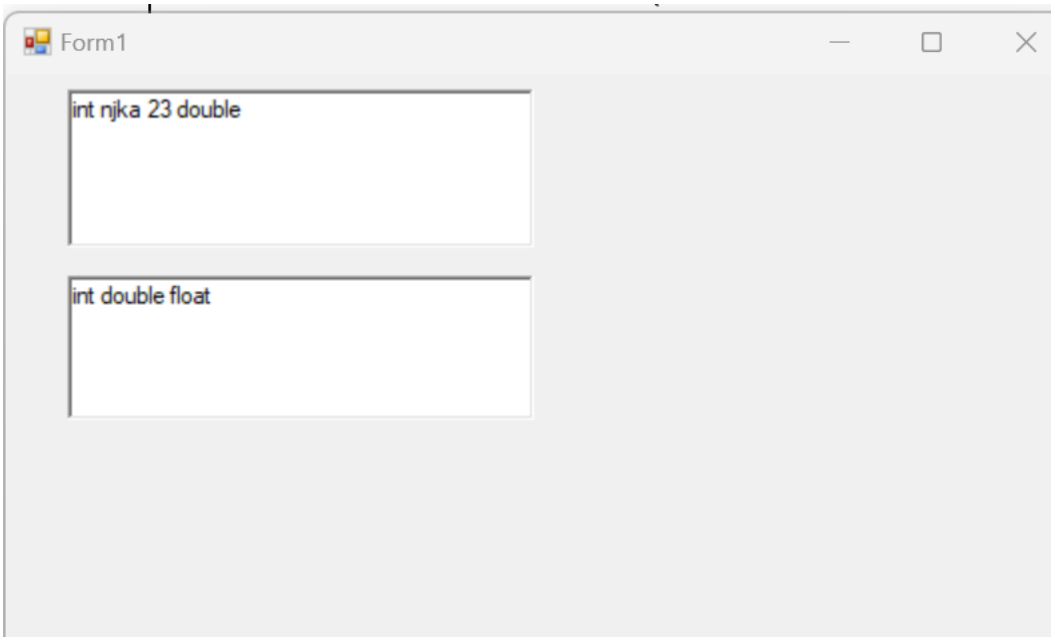

Form1
if 9 nasjk 2.22211
9 2.22211

Activity 2 :

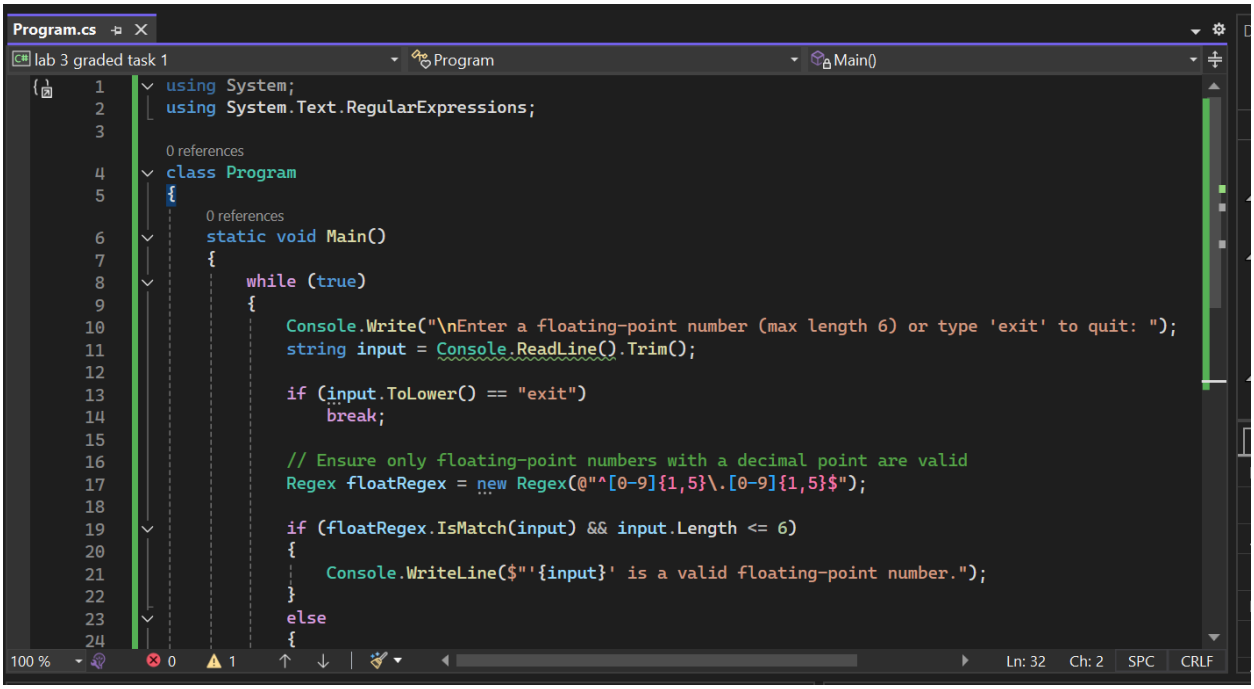

Form1.cs*
Form1.cs [Design]
Sessional1
Sessional1.Form1
richTextBox2
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using System.Text.RegularExpressions;
namespace Sessional1
{
3 references
public partial class Form1 : Form
{
1 reference
public Form1()
{
InitializeComponent();
}
0 references
private void button1_Click(object sender, EventArgs e)
{
100 %
1
0
Ln: 43
Ch: 6
SPC
CRLF

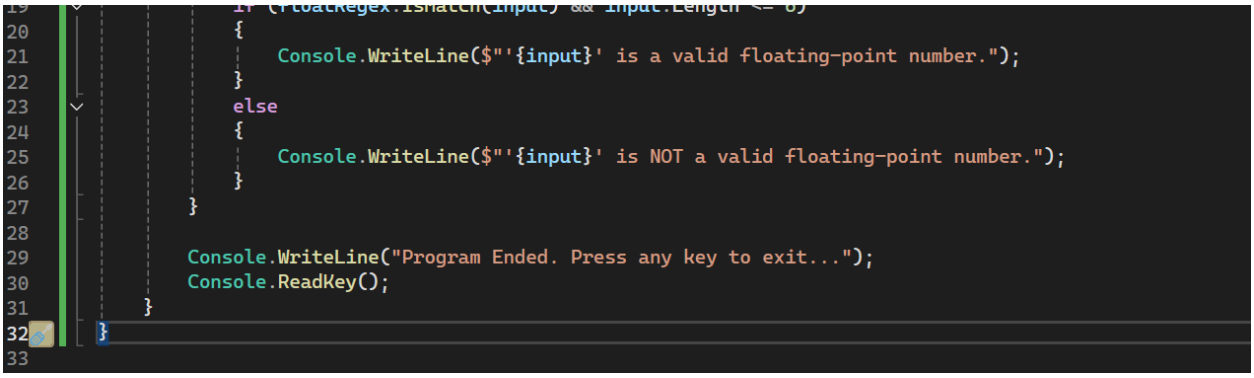
```
Sessional1.Form1                                    richTextBox2
0 references
private void button1_Click(object sender, EventArgs e)
{

    // take input from a richtextbox/textbox
    String var = richTextBox1.Text;
    // split the input on the basis of space
    String[] words = var.Split(' ');
    // Regular Expression for variables
    Regex regex1 = new Regex(@"^[int | float | char]*$");
    for (int i = 0; i < words.Length; i++)
    {
        Match match1 = regex1.Match(words[i]);
        if (match1.Success)
        {
            richTextBox2.Text += words[i] + " ";
        }
        else
        {
            MessageBox.Show("invalid " + words[i]);
        }
    }
}
}
```

Output:

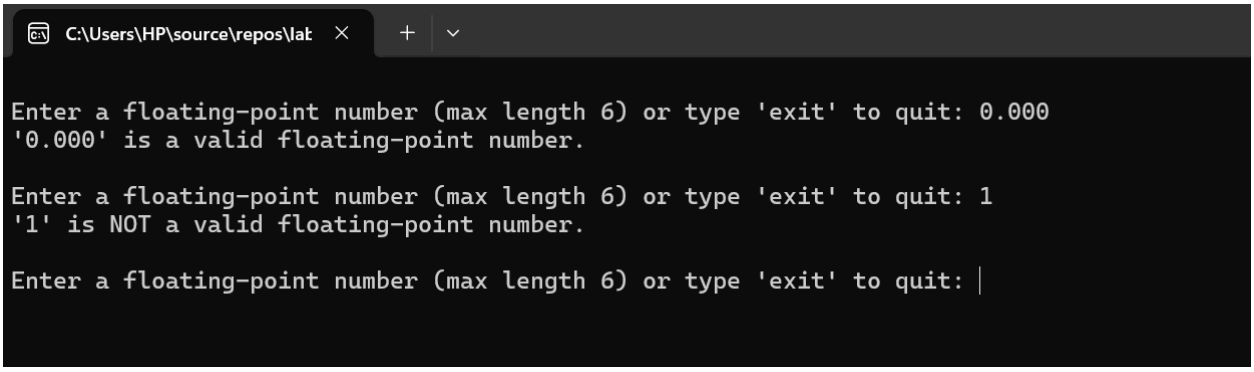


Graded Task 1:


Program.cs
lab 3 graded task 1
Program
Main()
using System;
using System.Text.RegularExpressions;
0 references
class Program
{
0 references
static void Main()
{
while (true)
{
Console.Write("\nEnter a floating-point number (max length 6) or type 'exit' to quit: ");
string input = Console.ReadLine().Trim();
if (input.ToLower() == "exit")
break;
// Ensure only floating-point numbers with a decimal point are valid
Regex floatRegex = new Regex(@"^[0-9]{1,5}\.[0-9]{1,5}$");
if (floatRegex.IsMatch(input) && input.Length <= 6)
{
Console.WriteLine($"'{input}' is a valid floating-point number.");
}
else
{
100 %
0
1
Ln: 32
Ch: 2
SPC
CRLF


{
Console.WriteLine($"'{input}' is a valid floating-point number.");
}
else
{
Console.WriteLine($"'{input}' is NOT a valid floating-point number.");
}
}
Console.WriteLine("Program Ended. Press any key to exit...");
Console.ReadKey();
}
}

Output:


C:\Users\HP\source\repos\lab
Enter a floating-point number (max length 6) or type 'exit' to quit: 0.000
'0.000' is a valid floating-point number.
Enter a floating-point number (max length 6) or type 'exit' to quit: 1
'1' is NOT a valid floating-point number.
Enter a floating-point number (max length 6) or type 'exit' to quit: