Thapelo Mookeng

PRG521 FA3

IT Software Development Semester 1

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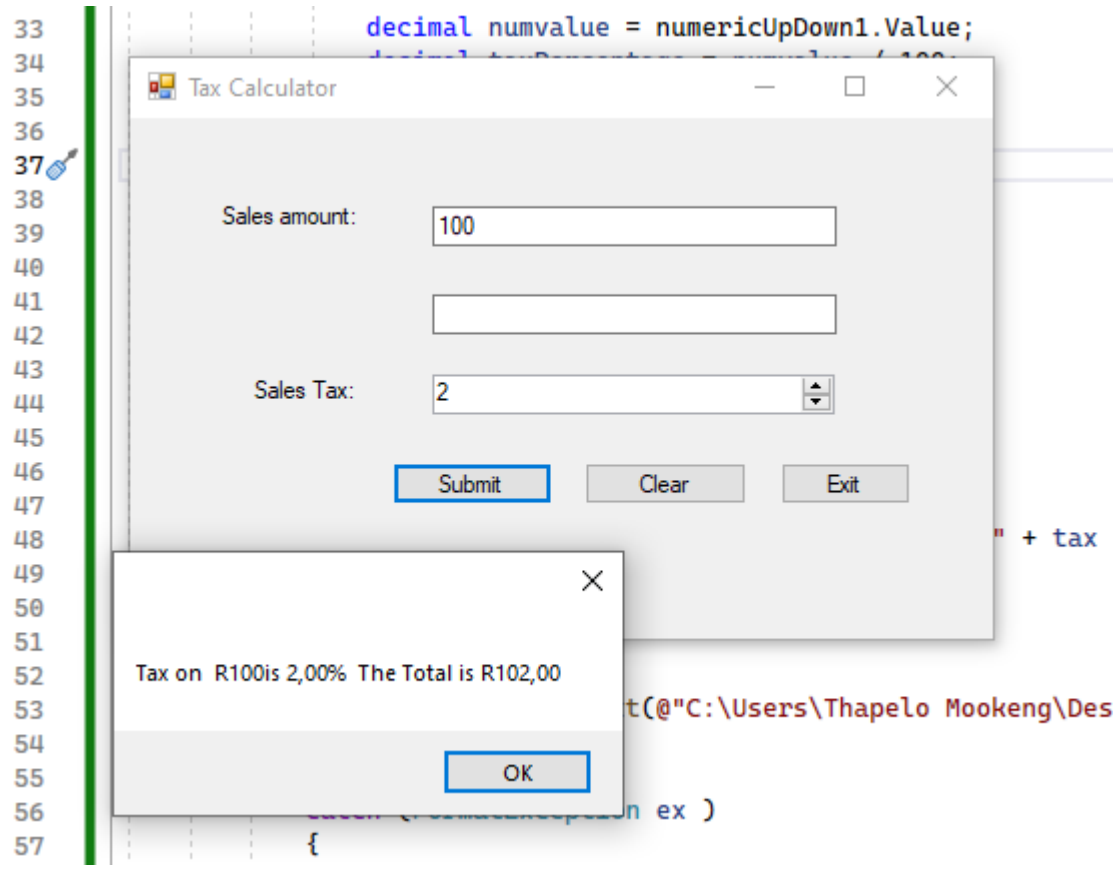
Output:



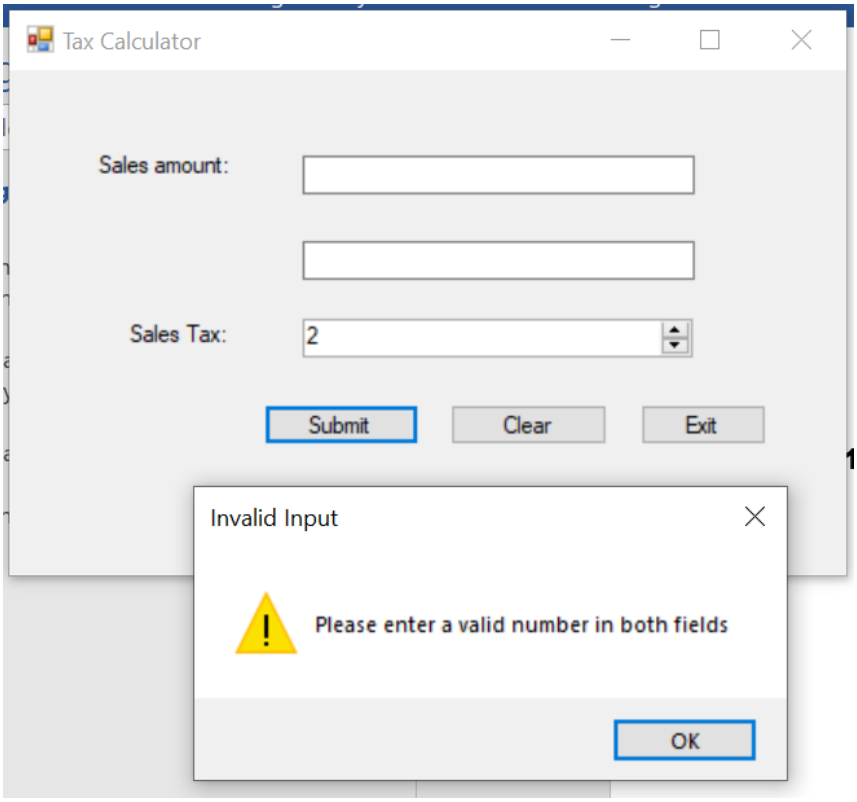
Coding:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.IO;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace TaxCalculator
{
    public partial class Form1 : Form
    {
        private object textBox3;

        public Form1()
        {
            InitializeComponent();
        }

        private void btnAdd_Click(object sender, EventArgs e)
        {
```

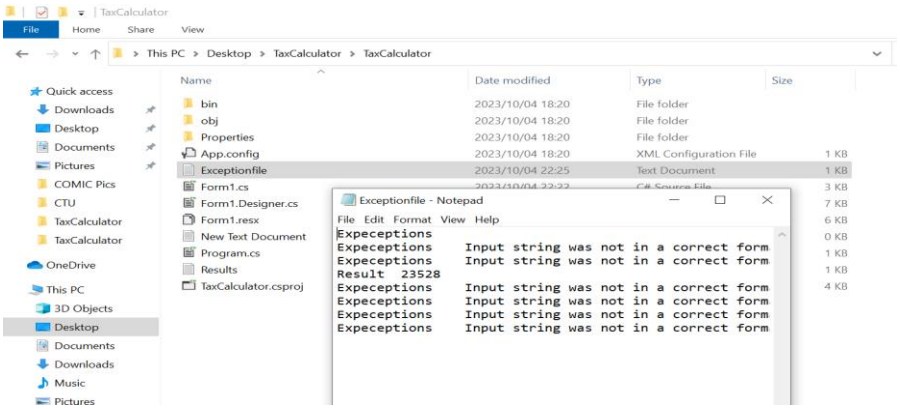
```
            int num1;
            try {


                num1 = int.Parse(txtNumber1.Text);



                decimal numvalue = numericUpDown1.Value;
                decimal taxPercentage = numvalue / 100;

                decimal tax = num1 * taxPercentage;
                decimal total = num1 + tax;









                int result = num1;

                MessageBox.Show("Tax on  R" + num1 + "is " + tax + "%  The Total
is R" + total);




                File.AppendAllText(@"C:\Users\Thapelo
Mookeng\Desktop\TaxCalculator\TaxCalculator\Results.txt", "Result" + "\t" +
result + Environment.NewLine);

            }
            catch (FormatException ex )
            {
                File.AppendAllText(@"C:\Users\Thapelo
Mookeng\Desktop\TaxCalculator\TaxCalculator\Exceptionfile.txt","Expeceptions"+
"\t"+ex.Message + Environment.NewLine);
                MessageBox.Show("Please enter a valid number in both fields",
"Invalid Input", MessageBoxButtons.OK, MessageBoxIcon.Warning);


            }
            finally
            {
                MessageBox.Show("Thank you!!!", "End of Program",
MessageBoxButtons.YesNoCancel, MessageBoxIcon.Information);


            }


        }

        private void btnClear_Click(object sender, EventArgs e)
        {
            txtNumber1.Text = null; txtNumber2.Text = null;
            numericUpDown1.Text = null;
        }

        private void btnExit_Click(object sender, EventArgs e)
        {
```

```
            DialogResult result = MessageBox.Show("Are you sure you want to exit
?", "Exit Appliaction",MessageBoxButtons.YesNo,MessageBoxIcon.Question);
            if (result == DialogResult.Yes)
            {
                Application.Exit();
            }
        }
    }
}
```

1. **Exception handling should be used to prevent users from entering invalid input (text, character…) (try, catch, and finally).**

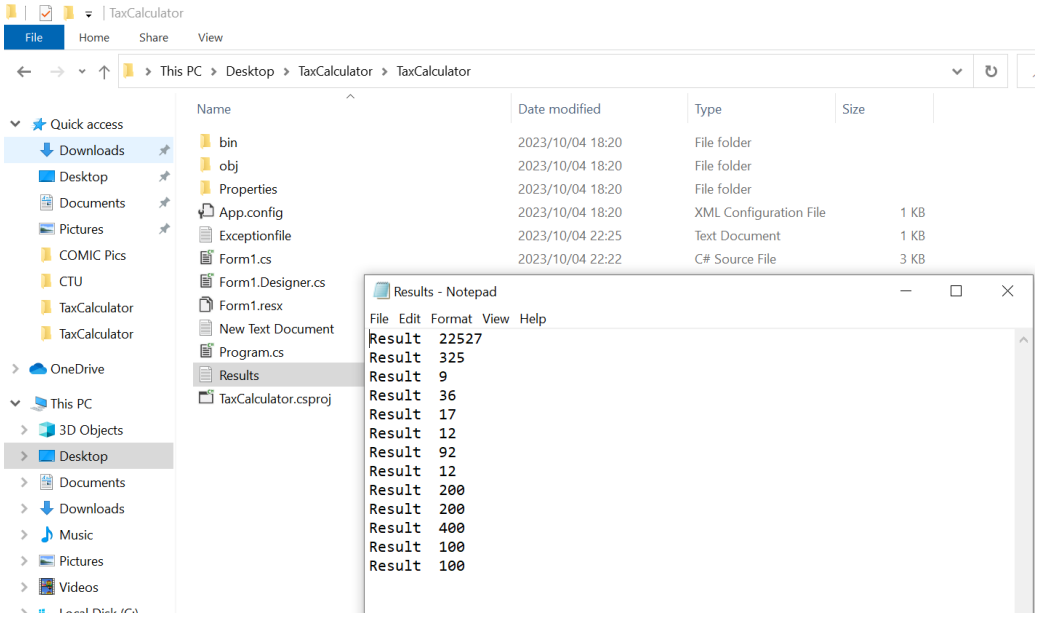


2. **All exception messages should be displayed using a message box and saved in a text file called Exceptionfile.txt**



3. All results should be saved in a file called TaxCalculation.txt. The result should be saved once the Submit button is

pressed.



3. Meaning your program will have two separate text files one to record all exceptions thrown – message and the other to record all tax calculations and the date and time the operation occurred.