

Python Class Example:-

additionclass.py

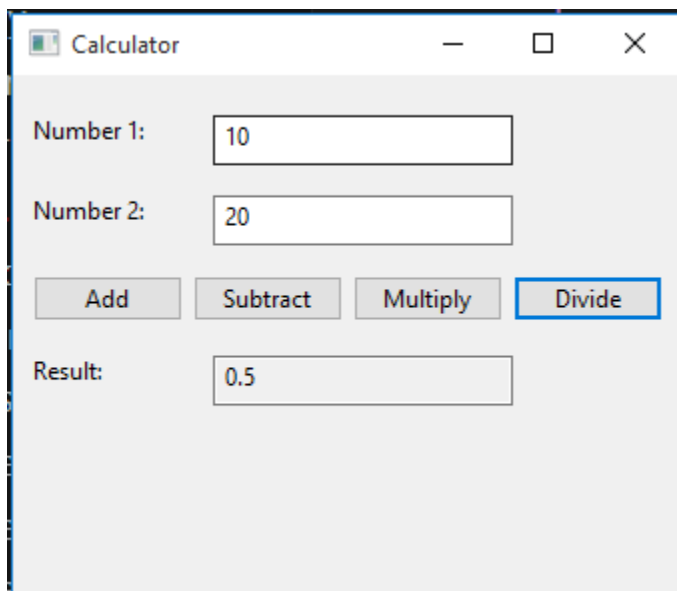
```
# Define the class
class Calculator:
    # Method to add two numbers
    def add(self, num1, num2):
        return num1 + num2

# Create an object of the Calculator class
calc = Calculator()

# Call the add method and print the result
result = calc.add(5, 7)
print("The sum is:", result)
```

Output :-

The sum is: 12



Wxpyhton Calculator Example :-

```
import wx

# Define the Calculator class with methods for operations
class Calculator:
    def add(self, num1, num2):
        return num1 + num2

    def subtract(self, num1, num2):
        return num1 - num2

    def multiply(self, num1, num2):
        return num1 * num2

    def divide(self, num1, num2):
        if num2 != 0:
            return num1 / num2
        else:
            return "Cannot divide by zero"

# Define the main application window
class CalculatorFrame(wx.Frame):
    def __init__(self, parent, title):
        super().__init__(parent, title=title, size=(350, 300))

        # Create a panel in the frame
        panel = wx.Panel(self)

        # Layout components (text fields, buttons, etc.)
        self.num1_label = wx.StaticText(panel, label="Number 1:", pos=(10, 20))
        self.num2_label = wx.StaticText(panel, label="Number 2:", pos=(10, 60))
        self.result_label = wx.StaticText(panel, label="Result:", pos=(10, 140))

        self.num1_text = wx.TextCtrl(panel, pos=(100, 20), size=(150, 25))
        self.num2_text = wx.TextCtrl(panel, pos=(100, 60), size=(150, 25))
        self.result_text = wx.TextCtrl(panel, pos=(100, 140), size=(150, 25),
style=wx.TE_READONLY)

        # Create buttons for each operation
        self.add_button = wx.Button(panel, label="Add", pos=(10, 100))
        self.subtract_button = wx.Button(panel, label="Subtract", pos=(90, 100))
        self.multiply_button = wx.Button(panel, label="Multiply", pos=(170, 100))
```

```

self.divide_button = wx.Button(panel, label="Divide", pos=(250, 100))

# Bind events for the buttons
self.add_button.Bind(wx.EVT_BUTTON, self.on_add)
self.subtract_button.Bind(wx.EVT_BUTTON, self.on_subtract)
self.multiply_button.Bind(wx.EVT_BUTTON, self.on_multiply)
self.divide_button.Bind(wx.EVT_BUTTON, self.on_divide)

self.calculator = Calculator() # Create an instance of the Calculator
class

# Show the frame
self.Show()

def on_add(self, event):
    num1 = float(self.num1_text.GetValue())
    num2 = float(self.num2_text.GetValue())
    result = self.calculator.add(num1, num2)
    self.result_text.SetValue(str(result))

def on_subtract(self, event):
    num1 = float(self.num1_text.GetValue())
    num2 = float(self.num2_text.GetValue())
    result = self.calculator.subtract(num1, num2)
    self.result_text.SetValue(str(result))

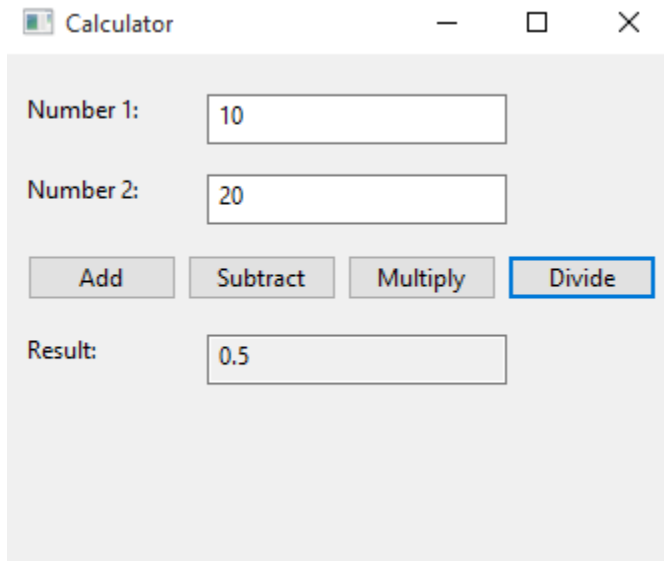
def on_multiply(self, event):
    num1 = float(self.num1_text.GetValue())
    num2 = float(self.num2_text.GetValue())
    result = self.calculator.multiply(num1, num2)
    self.result_text.SetValue(str(result))

def on_divide(self, event):
    num1 = float(self.num1_text.GetValue())
    num2 = float(self.num2_text.GetValue())
    result = self.calculator.divide(num1, num2)
    self.result_text.SetValue(str(result))

# Run the application
if __name__ == "__main__":
    app = wx.App(False)
    CalculatorFrame(None, "Calculator")
    app.MainLoop()

```

Output:-



Explanation:

1. **Calculator Class:** This class contains methods (`add`, `subtract`, `multiply`, `divide`) to perform the arithmetic operations.
2. **CalculatorFrame Class:** This class is a `wx.Frame` that represents the main window of the application. It has:
 - Text fields to input numbers (`num1_text` and `num2_text`).
 - A result field (`result_text`) to display the result.
 - Buttons for each operation (`add_button`, `subtract_button`, `multiply_button`, and `divide_button`).
 - Event bindings to handle button clicks (`on_add`, `on_subtract`, etc.), which fetch the values from the text fields, perform the corresponding calculation using the `Calculator` class, and display the result in the `result_text` field.
3. **Application Execution:** The application is started with `app.MainLoop()`.

How it works:

- Enter two numbers in the "Number 1" and "Number 2" fields.
- Click one of the operation buttons (Add, Subtract, Multiply, Divide).
- The result will be displayed in the "Result" field.

