

INSTRUCTIONS:

0. See and download the attached code simpleCalc.py and understand its coding style (It is actually in OOP code form)
1. Modify the program and add the ff: functionality
 - 1.1 **CLEAR or RESET** button that will clear the contents of the entry field
 - 1.2 Add an **ABOUT** button to display a **MessageBox** that will display your name, i.e. "Work of your Name"
 - 1.3 Create a **VALIDATION CODE** (try-except block) that will prevent the **USER** from typing text entry and display the message "Text is not allowed! - "Numbers Only"
 - 1.4 Make the Result text entry as **READONLY/VIEW** only

CODE:

```
from tkinter import *
from tkinter import messagebox

class SimpleCalc:
    def __init__(self, window):
        self.window = window
        self.window.title("Simple Calculator")
        self.window.geometry("300x380")
        self.window.configure(bg="#778DA9") # Background color

        # Labels and Entries
        Label(window, text="Number 1:", bg="#778DA9", fg="black").pack(pady=2)
        self.num1 = Entry(window)
        self.num1.pack()

        Label(window, text="Number 2:", bg="#778DA9", fg="black").pack(pady=2)
        self.num2 = Entry(window)
        self.num2.pack()

        Label(window, text="Result:", bg="#778DA9", fg="black").pack(pady=2)
        self.result = Entry(window, state="readonly")
        self.result.pack()

        # Button style
        btn_style = {"bg": "#1B263B", "fg": "white", "width": 12}

        # Operator buttons using symbols
        Button(window, text="+", command=self.add, **btn_style).pack(pady=4)
        Button(window, text="-", command=self.subtract, **btn_style).pack(pady=4)
        Button(window, text="x", command=self.multiply, **btn_style).pack(pady=4)
        Button(window, text="÷", command=self.divide, **btn_style).pack(pady=4)

        Button(window, text="Clear", command=self.clear, **btn_style).pack(pady=6)
        Button(window, text="About", command=self.about, **btn_style).pack(pady=2)
```

```
def validate(self, value):
    try:
        return float(value)
    except:
        messagebox.showerror("Invalid Input", "Text is not allowed! - Numbers Only")
        return None

def show_result(self, value):
    self.result.config(state="normal")
    self.result.delete(0, END)
    self.result.insert(0, str(value))
    self.result.config(state="readonly")

def add(self):
    n1, n2 = self.get_inputs()
    if n1 is None or n2 is None: return
    self.show_result(n1 + n2)

def subtract(self):
    n1, n2 = self.get_inputs()
    if n1 is None or n2 is None: return
    self.show_result(n1 - n2)

def multiply(self):
    n1, n2 = self.get_inputs()
    if n1 is None or n2 is None: return
    self.show_result(n1 * n2)

def divide(self):
    n1, n2 = self.get_inputs()
    if n1 is None or n2 is None: return
    if n2 == 0:
        messagebox.showerror("Math Error", "Cannot divide by zero!")
        return
    self.show_result(n1 / n2)

def get_inputs(self):
    return self.validate(self.num1.get()), self.validate(self.num2.get())

def clear(self):
    self.num1.delete(0, END)
    self.num2.delete(0, END)
    self.result.config(state="normal")
```

```
self.result.delete(0, END)
self.result.config(state="readonly")

def about(self):
    messagebox.showinfo("About", "The work of Quiambao, Arianna Marie B.")

# Run app
window = Tk()
app = SimpleCalc(window)
window.mainloop()
```