**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

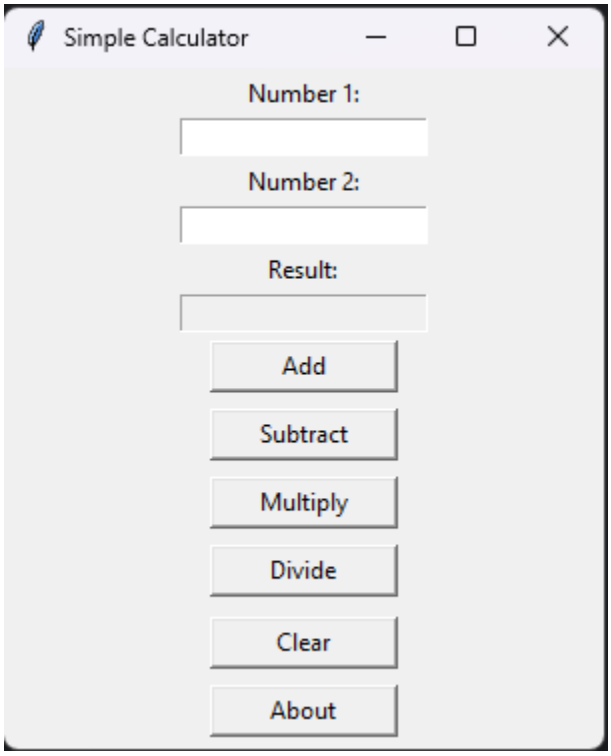
# CODE:

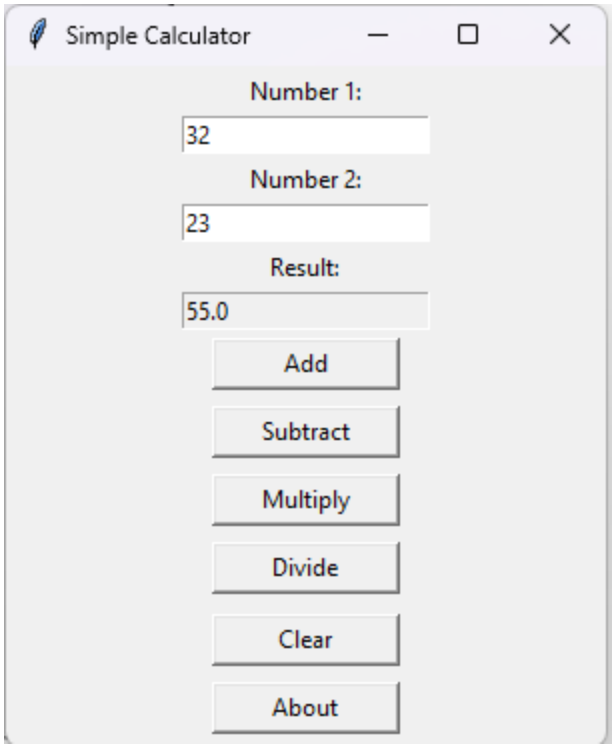
```
from tkinter import *
from tkinter import messagebox

class SimpleCalc:
    def __init__(self, window):
        self.window = window
        self.window.title("Simple Calculator")
        self.window.geometry("300x340")

        Label(window, text="Number 1:").pack(pady=2)
        self.num1 = Entry(window)
        self.num1.pack()

        Label(window, text="Number 2:").pack(pady=2)
        self.num2 = Entry(window)
        self.num2.pack()

        Label(window, text="Result:").pack(pady=2)
        self.result = Entry(window, state="readonly")
        self.result.pack()

        Button(window, text="Add", width=12,
command=self.add).pack(pady=4)
        Button(window, text="Subtract", width=12,
command=self.subtract).pack(pady=4)
        Button(window, text="Multiply", width=12,
command=self.multiply).pack(pady=4)
        Button(window, text="Divide", width=12,
command=self.divide).pack(pady=4)
```

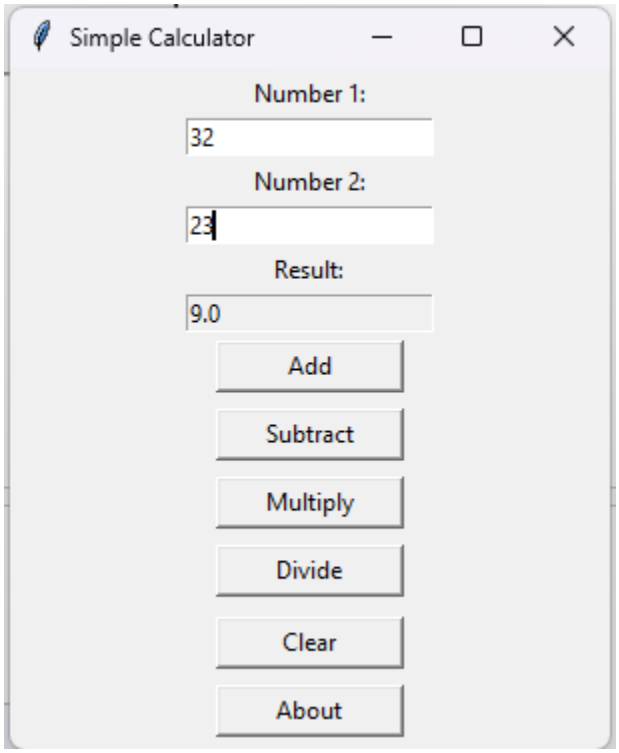
```
        Button(window, text="Clear", width=12,
command=self.clear).pack(pady=6)
        Button(window, text="About", width=12,
command=self.about).pack(pady=2)

    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):
        n1 = self.validate(self.num1.get())
        n2 = self.validate(self.num2.get())
```

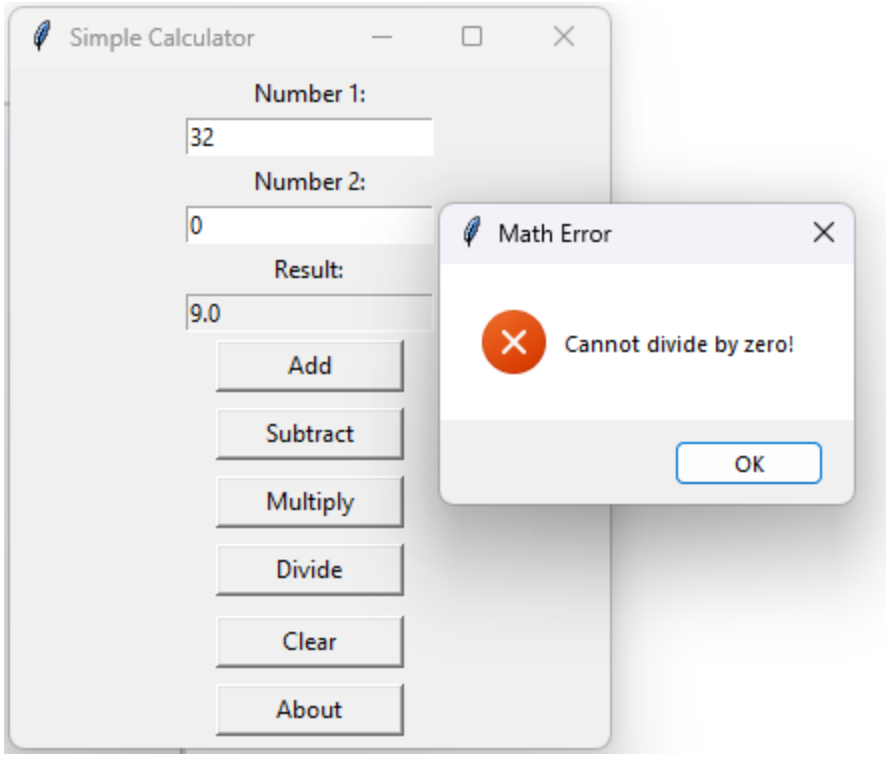
```
        return n1, n2

    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", "Work of Quiambao, Aron Daniel B.")

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

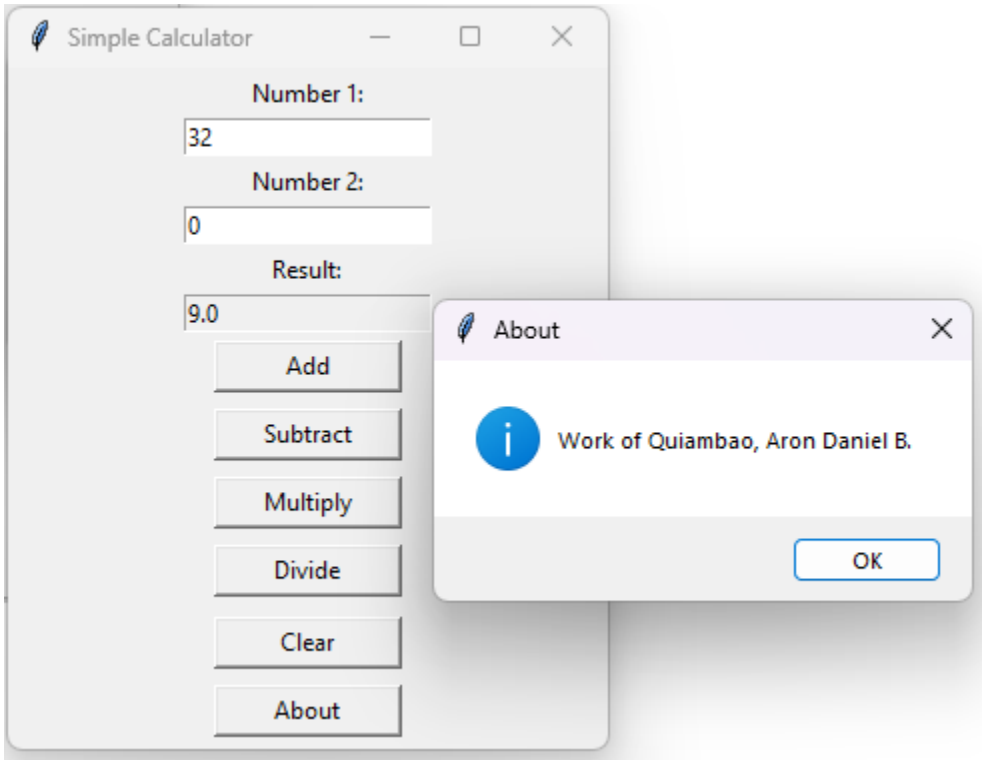
## SAMPLE OUTPUTs:




Simple Calculator
Number 1:
32
Number 2:
23
Result:
55.0
Add
Subtract
Multiply
Divide
Clear
About


Simple Calculator
Number 1:
32
Number 2:
23
Result:
9.0
Add
Subtract
Multiply
Divide
Clear
About


Simple Calculator
Number 1:
32
Number 2:
0
Result:
9.0
Add
Subtract
Multiply
Divide
Clear
About
Math Error
Cannot divide by zero!
OK


Simple Calculator
Number 1:
32
Number 2:
0
Result:
9.0
Add
Subtract
Multiply
Divide
Clear
About
About
Work of Quiambao, Aron Daniel B.
OK