



```
from tkinter import *
```

```
# Global variable to hold the equation text
equation_text = ""
```

```
def button_press(num):
    global equation_text
    equation_text += str(num)
    equation_label.set(equation_text)
```

```
def equals():
    global equation_text
    try:
        total = str(eval(equation_text))
        equation_label.set(total)
        equation_text = total
    except Exception as e:
        equation_label.set("Error")
        equation_text = ""
```

```
def clear():
    global equation_text
    equation_text = ""
    equation_label.set("")
```

```
# GUI setup
window = Tk()
window.title("Design of Calculator")
window.geometry("600x600")
```

```
equation_label = StringVar()
```

```
label = Label(window, textvariable=equation_label, bg="red", font="arial 15 bold",
width=30, height=2)
label.pack()
```

```
frame = Frame(window)
```

```
frame.pack()
```

```
# Buttons
```

```
btn1 = Button(frame, text=1, width=3, height=1, font="arial 14 bold",  
command=lambda: button_press(1))  
btn1.grid(row=0, column=0)
```

```
btn2 = Button(frame, text=2, width=3, height=1, font="arial 14 bold",  
command=lambda: button_press(2))  
btn2.grid(row=0, column=1)
```

```
btn3 = Button(frame, text=3, width=3, height=1, font="arial 14 bold",  
command=lambda: button_press(3))  
btn3.grid(row=0, column=2)
```

```
btn4 = Button(frame, text=4, width=3, height=1, font="arial 14 bold",  
command=lambda: button_press(4))  
btn4.grid(row=1, column=0)
```

```
btn5 = Button(frame, text=5, width=3, height=1, font="arial 14 bold",  
command=lambda: button_press(5))  
btn5.grid(row=1, column=1)
```

```
btn6 = Button(frame, text=6, width=3, height=1, font="arial 14 bold",  
command=lambda: button_press(6))  
btn6.grid(row=1, column=2)
```

```
btn7 = Button(frame, text=7, width=3, height=1, font="arial 14 bold",  
command=lambda: button_press(7))  
btn7.grid(row=2, column=0)
```

```
btn8 = Button(frame, text=8, width=3, height=1, font="arial 14 bold",  
command=lambda: button_press(8))  
btn8.grid(row=2, column=1)
```

```
btn9 = Button(frame, text=9, width=3, height=1, font="arial 14 bold",  
command=lambda: button_press(9))  
btn9.grid(row=2, column=2)
```

```
btn0 = Button(frame, text="0", width=3, height=1, font="arial 14 bold",  
command=lambda: button_press(0))  
btn0.grid(row=3, column=0)
```

```
btnplus = Button(frame, text="+", width=3, height=1, font="arial 14 bold",  
command=lambda: button_press("+"))  
btnplus.grid(row=0, column=3)
```

```
btnminus = Button(frame, text="-", width=3, height=1, font="arial 14 bold",  
command=lambda: button_press("-"))  
btnminus.grid(row=1, column=3)
```

```
btnmultiply = Button(frame, text="*", width=3, height=1, font="arial 14 bold",  
command=lambda: button_press("*"))  
btnmultiply.grid(row=2, column=3)
```

```
btndivision = Button(frame, text="/", width=3, height=1, font="arial 14 bold",  
command=lambda: button_press("/"))  
btndivision.grid(row=3, column=3)
```

```
btndot = Button(frame, text=".", width=3, height=1, font="arial 14 bold",  
command=lambda: button_press("."))  
btndot.grid(row=3, column=1)
```

```
btnequals = Button(frame, text="=", width=3, height=1, font="arial 14 bold",  
command=equals)  
btnequals.grid(row=3, column=2)
```

```
btnclear = Button(window, text="CLEAR", width=30, height=1, font="arial 14 bold",  
command=clear)  
btnclear.pack(pady=10)
```

```
window.mainloop()
```