*# Python program to create a simple GUI  
# calculator using Tkinter  
  
# import everything from tkinter module*from tkinter import \*  
  
*# globally declare the expression variable*expression = ""  
  
  
*# Function to update expression  
# in the text entry box*def press(num):  
 *# point out the global expression variable* global expression  
  
 *# concatenation of string* expression = expression + str(num)  
  
 *# update the expression by using set method* equation.set(expression)  
  
  
*# Function to evaluate the final expression*def equalpress():  
 *# Try and except statement is used  
 # for handling the errors like zero  
 # division error etc.  
  
 # Put that code inside the try block  
 # which may generate the error* try:  
  
 global expression  
  
 *# eval function evaluate the expression  
 # and str function convert the result  
 # into string* total = str(eval(expression))  
  
 equation.set(total)  
  
 *# initialize the expression variable  
 # by empty string* expression = ""  
  
 *# if error is generate then handle  
 # by the except block* except:  
  
 equation.set(" error ")  
 expression = ""  
  
  
*# Function to clear the contents  
# of text entry box*def clear():  
 global expression  
 expression = ""  
 equation.set("")  
  
  
*# Driver code*if \_\_name\_\_ == "\_\_main\_\_":  
 *# create a GUI window* gui = Tk()  
  
 *# set the background colour of GUI window* gui.configure(background="light blue")  
  
 *# set the title of GUI window* gui.title("Simple Calculator")  
  
 *# set the configuration of GUI window* gui.geometry("270x150")  
  
 *# StringVar() is the variable class  
 # we create an instance of this class* equation = StringVar()  
  
 *# create the text entry box for  
 # showing the expression .* expression\_field = Entry(gui, textvariable=equation)  
  
 *# grid method is used for placing  
 # the widgets at respective positions  
 # in table like structure .* expression\_field.grid(columnspan=4, ipadx=70)  
  
 *# create a Buttons and place at a particular  
 # location inside the root window .  
 # when user press the button, the command or  
 # function affiliated to that button is executed .* button1 = Button(gui, text=' 1 ', fg='black', bg='white',  
 command=lambda: press(1), height=1, width=7)  
 button1.grid(row=2, column=0)  
  
 button2 = Button(gui, text=' 2 ', fg='black', bg='white',  
 command=lambda: press(2), height=1, width=7)  
 button2.grid(row=2, column=1)  
  
 button3 = Button(gui, text=' 3 ', fg='black', bg='white',  
 command=lambda: press(3), height=1, width=7)  
 button3.grid(row=2, column=2)  
  
 button4 = Button(gui, text=' 4 ', fg='black', bg='white',  
 command=lambda: press(4), height=1, width=7)  
 button4.grid(row=3, column=0)  
  
 button5 = Button(gui, text=' 5 ', fg='black', bg='white',  
 command=lambda: press(5), height=1, width=7)  
 button5.grid(row=3, column=1)  
  
 button6 = Button(gui, text=' 6 ', fg='black', bg='white',  
 command=lambda: press(6), height=1, width=7)  
 button6.grid(row=3, column=2)  
  
 button7 = Button(gui, text=' 7 ', fg='black', bg='white',  
 command=lambda: press(7), height=1, width=7)  
 button7.grid(row=4, column=0)  
  
 button8 = Button(gui, text=' 8 ', fg='black', bg='white',  
 command=lambda: press(8), height=1, width=7)  
 button8.grid(row=4, column=1)  
  
 button9 = Button(gui, text=' 9 ', fg='black', bg='white',  
 command=lambda: press(9), height=1, width=7)  
 button9.grid(row=4, column=2)  
  
 button0 = Button(gui, text=' 0 ', fg='black', bg='white',  
 command=lambda: press(0), height=1, width=7)  
 button0.grid(row=5, column=0)  
  
 plus = Button(gui, text=' + ', fg='black', bg='violet',  
 command=lambda: press("+"), height=1, width=7)  
 plus.grid(row=2, column=3)  
  
 minus = Button(gui, text=' - ', fg='black', bg='violet',  
 command=lambda: press("-"), height=1, width=7)  
 minus.grid(row=3, column=3)  
  
 multiply = Button(gui, text=' \* ', fg='black', bg='violet',  
 command=lambda: press("\*"), height=1, width=7)  
 multiply.grid(row=4, column=3)  
  
 divide = Button(gui, text=' / ', fg='black', bg='violet',  
 command=lambda: press("/"), height=1, width=7)  
 divide.grid(row=5, column=3)  
  
 equal = Button(gui, text=' = ', fg='black', bg='violet',  
 command=equalpress, height=1, width=7)  
 equal.grid(row=5, column=2)  
  
 clear = Button(gui, text='Clear', fg='black', bg='red',  
 command=clear, height=1, width=7)  
 clear.grid(row=5, column='1')  
  
 Decimal= Button(gui, text='.', fg='black', bg='violet',  
 command=lambda: press('.'), height=1, width=7)  
 Decimal.grid(row=6, column=0)  
 *# start the GUI* gui.mainloop()