from tkinter import \*

def iCalc(source, side):

storeObj = Frame(source, borderwidth=4, bd=4, bg="cyan")

storeObj.pack(side=side, expand =YES, fill =BOTH)

return storeObj

def button(source, side, text, command=None):

storeObj = Button(source, text=text, command=command)

storeObj.pack(side=side, expand = YES, fill=BOTH)

return storeObj

class app(Frame):

def \_\_init\_\_(self):

Frame.\_\_init\_\_(self)

self.option\_add('\*Font', 'arial 20 bold')

self.pack(expand = YES, fill =BOTH)

self.master.title('Calculator')

display = StringVar()

Entry(self, relief=RIDGE, textvariable=display,

justify='right'

, bd=30, bg="cyan").pack(side=TOP,

expand=YES, fill=BOTH)

for clearButton in (["C"]):

erase = iCalc(self, TOP)

for ichar in clearButton:

button(erase, LEFT, ichar, lambda

storeObj=display, q=ichar: storeObj.set(''))

for numButton in ("123\*", "456/", "789+", "0.-"):

FunctionNum = iCalc(self, TOP)

for iEquals in numButton:

button(FunctionNum, LEFT, iEquals, lambda

storeObj=display, q=iEquals: storeObj

.set(storeObj.get() + q))

EqualButton = iCalc(self, TOP)

for iEquals in "=":

if iEquals == '=':

btniEquals = button(EqualButton, LEFT, iEquals)

btniEquals.bind('<ButtonRelease-1>', lambda e,s=self,

storeObj=display: s.calc(storeObj), '+')

else:

btniEquals = button(EqualButton, LEFT, iEquals,

lambda storeObj=display, s=' %s ' % iEquals: storeObj.set

(storeObj.get() + s))

def calc(self, display):

try:

display.set(eval(display.get()))

except:

display.set("ERROR")

if \_\_name\_\_=='\_\_main\_\_':

app().mainloop()