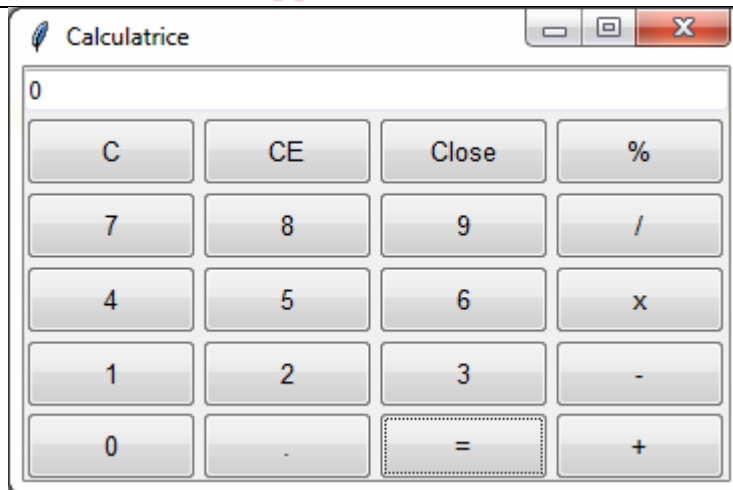


Interface Homme Machine Python-Tkinter Travaux Pratiques N° 6Bis

Objetif :

- ❖ Appliquer les concepts étudiés au TP6 pour concevoir une application qui réalise une calculatrice.

Interface de l'application



Code pour générer l'interface et pour gérer les événements

```
from tkinter import Tk, W, E, StringVar
from tkinter.ttk import Frame, Button, Entry, Style

root = Tk()
root.title("Calculatrice")

frame = Frame(root)

Style().configure("TButton", padding=(0, 5, 0, 5), font='serif 10')

frame.columnconfigure(0, pad=3)
frame.columnconfigure(1, pad=3)
frame.columnconfigure(2, pad=3)
frame.columnconfigure(3, pad=3)

frame.rowconfigure(0, pad=3)
frame.rowconfigure(1, pad=3)
frame.rowconfigure(2, pad=3)
frame.rowconfigure(3, pad=3)
frame.rowconfigure(4, pad=3)

entryvar = StringVar(frame)
entryvar.set("")
entry = Entry(frame, textvariable = entryvar)
```

```

entry.grid(row=0, column=0, colspan=4, sticky=W+E)

cls = Button(frame, text="C", command=lambda:entryvar.set(""))
cls.grid(row=1, column=0)
back = Button(frame, text="CE")
back.grid(row=1, column=1)

close = Button(frame, text="Close", command=lambda:quit())
close.grid(row=1, column=2)

quotient = Button(frame, text="%")
quotient.grid(row=1, column=3)
seven = Button(frame, text="7",
command=lambda:entryvar.set(entryvar.get()+"7"))
seven.grid(row=2, column=0)
eight = Button(frame, text="8",
command=lambda:entryvar.set(entryvar.get()+"8"))
eight.grid(row=2, column=1)
nine = Button(frame, text="9",
command=lambda:entryvar.set(entryvar.get()+"9"))
nine.grid(row=2, column=2)
div = Button(frame, text="/")
div.grid(row=2, column=3)

four = Button(frame, text="4")
four.grid(row=3, column=0)
five = Button(frame, text="5")
five.grid(row=3, column=1)
six = Button(frame, text="6",
command=lambda:entryvar.set(entryvar.get()+"6"))
six.grid(row=3, column=2)
mul = Button(frame, text="x",
command=lambda:entryvar.set(entryvar.get()+"*") )
mul.grid(row=3, column=3)

one = Button(frame, text="1")
one.grid(row=4, column=0)
two = Button(frame, text="2")
two.grid(row=4, column=1)
three = Button(frame, text="3")
three.grid(row=4, column=2)
minus = Button(frame, text="-")
minus.grid(row=4, column=3)

zero = Button(frame, text="0",
command=lambda:entryvar.set(entryvar.get()+"0"))
zero.grid(row=5, column=0)
dot = Button(frame, text=".",
command=lambda:entryvar.set(entryvar.get()+"."))
dot.grid(row=5, column=1)
equal = Button(frame, text="=",
command=lambda:entryvar.set(eval(entryvar.get())))
equal.grid(row=5, column=2)
plus = Button(frame, text="+")
plus.grid(row=5, column=3)

frame.pack()

one.bind("<Button-1>", lambda event : ajouter(event, "1"))
two.bind("<Button-1>", lambda event : ajouter(event, "2"))

```

```
three.bind("<Button-1>", lambda event : ajouter(event, "3"))
four.bind("<Button-1>", lambda event : ajouter(event, "4"))
five.bind("<Button-1>", lambda event : ajouter(event, "5"))

#*****Gestionnaires des événements*****
def ajouter(event, x):
    entryvar.set(entryvar.get() + x)

def ajouterbis(event):
    w = event.widget
    s = entryvar.get()
    s = s + w["text"] #ou s+w.cget("text")
    entryvar.set(s)

def gereBack(event):
    s = entryvar.get()
    entryvar.set(s[0:len(s)-1])
#*****

back.bind("<Button-1>", gereBack)
plus.bind("<Button-1>", ajouterbis)
minus.bind("<Button-1>", ajouterbis)
div.bind("<Button-1>", ajouterbis)
quotient.bind("<Button-1>", ajouterbis)

root.mainloop()
```