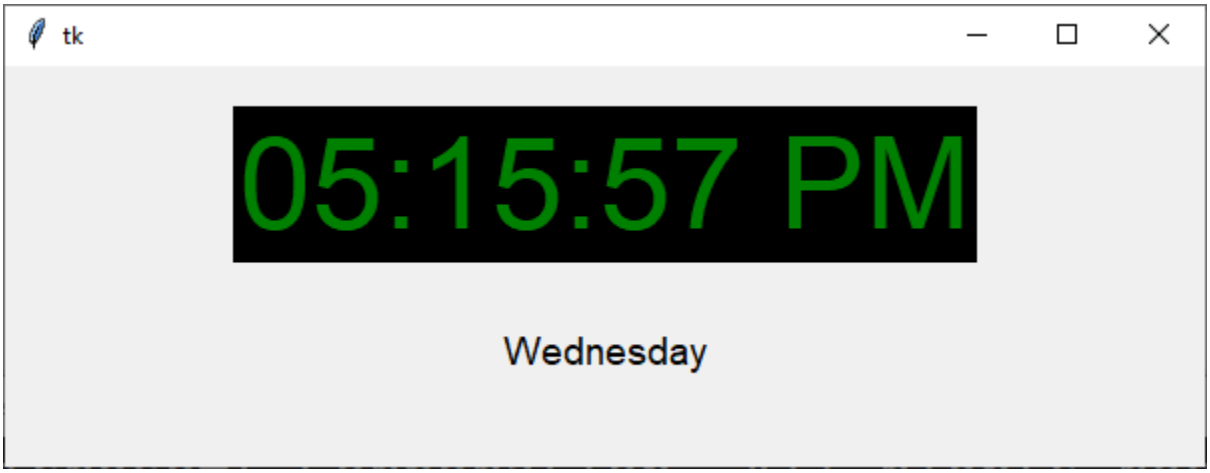
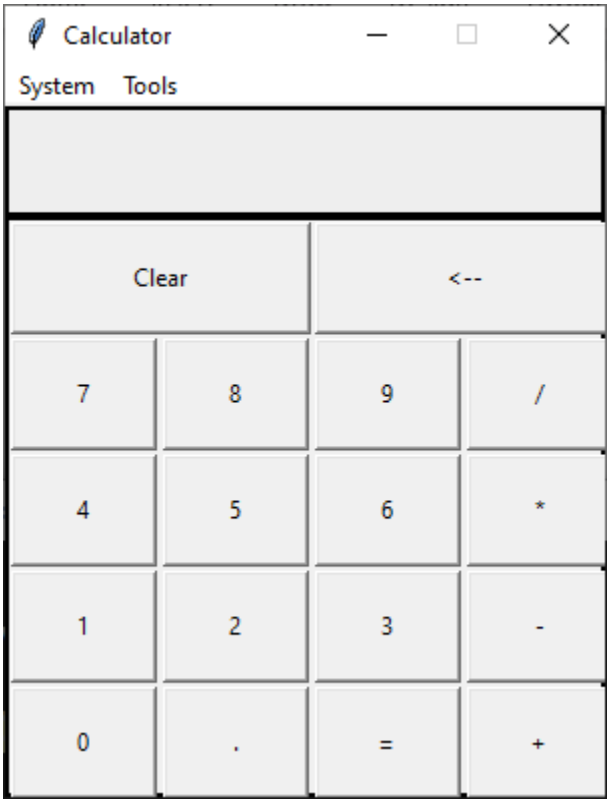
1 Clock




```
from tkinter import *
import time

root = Tk()
root.geometry("600x200")

def clock():
    hour = time.strftime("%I")
    minute = time.strftime("%M")
    second = time.strftime("%S")
    day = time.strftime("%A")
    am_pm = time.strftime("%p")

    my_label.config(text=hour + ":" + minute + ":" + second + " " + am_pm)
    my_label.after(1000, clock)

    my_label2.config(text = day)
```

```
def update():
    my_label.config(text="New Text")

my_label = Label(root, text="", font=("Helvetica", 48), fg="green", bg="black")
my_label.pack(pady=20)

my_label2 = Label(root, text="", font=("Helvetica", 14))
my_label2.pack(pady=10)

clock()

root.mainloop()
```

2 Caculator



Hướng dẫn layout:

```
from tkinter import *


root = Tk()
root.title("Calculator")
root.geometry("300x345")
root.resizable(0, 0)  # Cannot resize
expression = ""
input_text = StringVar()


input_frame = Frame(root, width=300, height=50, bd=0,
                highlightbackground="black", highlightcolor="black", highlightthickness=2)
input_frame.pack(side=TOP)


# Tạo thẻ input bên trong khung
input_field = Entry(input_frame, font="Arial 18 bold", textvariable=input_text,
                width=50, background="#eee", bd=0, justify=RIGHT)
input_field.grid(row=0, column=0)
input_field.pack(ipady=10)  # internal padding y


# Tạo frame bao chứa các button bên dưới
button_frame = Frame(root, width=300, height=275, bd=0,
                 highlightbackground="black", highlightcolor="black", highlightthickness=2)
button_frame.pack(side=TOP)
clear = Button(button_frame, text="Clear", height=3, width=20).grid(
   row=0, column=0, columnspan=2, padx=1, pady=1)
back = Button(button_frame, text="<--", height=3, width=20).grid(
   row=0, column=2, columnspan=2, padx=1, pady=1)


# Row 1: 7,8,9, /
```

```
so7 = Button(button_frame, text="7", width=9, height=3).grid(
   row=1, column=0, padx=1, pady=1)
so8 = Button(button_frame, text="8", width=9, height=3).grid(
   row=1, column=1, padx=1, pady=1)
so8 = Button(button_frame, text="9", width=9, height=3).grid(
   row=1, column=2, padx=1, pady=1)
chia = Button(button_frame, text="/", width=9, height=3).grid(
   row=1, column=3, padx=1, pady=1)

# Row 2: 4, 5, 6, *
so4 = Button(button_frame, text="4", width=9, height=3).grid(
   row=2, column=0, padx=1, pady=1)
so5 = Button(button_frame, text="5", width=9, height=3).grid(
   row=2, column=1, padx=1, pady=1)
so6 = Button(button_frame, text="6", width=9, height=3).grid(
   row=2, column=2, padx=1, pady=1)
nhan = Button(button_frame, text="*", width=9, height=3).grid(
   row=2, column=3, padx=1, pady=1)

# Row 3: 1, 2, 3, -
so1 = Button(button_frame, text="1", width=9, height=3).grid(
   row=3, column=0, padx=1, pady=1)
so2 = Button(button_frame, text="2", width=9, height=3).grid(
   row=3, column=1, padx=1, pady=1)
so3 = Button(button_frame, text="3", width=9, height=3).grid(
   row=3, column=2, padx=1, pady=1)
tru = Button(button_frame, text="-", width=9, height=3).grid(
   row=3, column=3, padx=1, pady=1)
```

```
# Row 4: 0, ., =, +
so0 = Button(button_frame, text="0", width=9, height=3).grid(
    row=4, column=0, padx=1, pady=1)
cham = Button(button_frame, text=".", width=9, height=3).grid(
    row=4, column=1, padx=1, pady=1)
bang = Button(button_frame, text="=", width=9, height=3).grid(
    row=4, column=2, padx=1, pady=1)
cong = Button(button_frame, text="+", width=9, height=3).grid(
    row=4, column=3, padx=1, pady=1)


# RUN
root.mainloop()
```