

Using Buttons and Labels with Python GUI Event Driven Programming

The following example uses buttons to modify labels :

```
from tkinter import *

# create the main window of
# the application creating
# main window object named window

#Tkinter (pronounced "Tee-Kay-Inter)

def changeLabel1():
    label1.config(text= "Hello World!")

# The geometry() method defines the width, height and coordinates of the top left corner of the frame as
below
# (all values are in pixels): window.geometry("widthxheight+XPOS+YPOS") The application
# object then enters an event listening loop by calling the mainloop() method.

window=Tk()

window.title('Hello World')
window.geometry("400x300+200+200")

# add widgets here

# Create label1
label1=Label(window,
             text="This is Label widget",
             fg='red',
             font=("Helvetica",16))
label1.place(x=80, y=50)

# create button1
button1=Button(window,
               text="This is Button widget",
               fg='blue',
               font=("Helvetica", 16),
               command = changeLabel1)
button1.place(x=80, y=100)

window.mainloop()
```

GUI - Assignment #1

1. Create a program that uses 4 buttons, to output translated text in 4 languages, including English. Make the colour of each translation a different colour and font.

Try the Google translator for translations.

2. Create a program that uses a button to output a random number (range 1 to 100) in a label. Make this number red and as large as possible.

```
import random

print(random.randint(0,9))
```

3. Create a Riddle application that displays a riddle and then solves it when the answer button is clicked.

Example :

*What is yours but your friend uses more than you do?
Your name.*

<http://en.wikipedia.org/wiki/Riddle>