# **Graphical User Interface (GUI)**

```
import tkinter as tk

# create instance
win = tk.Tk()

# add title
win.title("Python GUI")

# adding Label
tk.Label(win, text="A Label").grid(column=0, row=0)

# button click event function
def click_me():
    action.configure(text="*** I have been clicked! ****")

# adding a button
action = tk.Button(win, text="Click Me!", command=click_me)
action.grid(column=1, row=0)

# start GUI
win.mainloop()
```

**Tkinter is Python's** de-facto standard GUI (Graphical User Interface) package. It **is** a thin object-oriented layer on top of Tcl/**Tk**. **Tkinter is** not the only GUI Programming toolkit for **Python**. It **is** however the most commonly used one.

#### Example 1

from tkinter import \* # import all definitions from tkinter

```
window = Tk() # Create a window
label = Label(window, text = "Welcome to Python") # Create a label
button = Button(window, text = "Click Me") # Create a button
label.pack() # Place the label in the window
button.pack() # Place the button in the window
```

window.mainloop() # Create an event loop

## Example 2

```
from tkinter import *

window = Tk()
window.title("Welcome to GUI app")
window.geometry('350x200')
lbl = Label(window, text="Hello")
lbl.grid(column=0, row=0)
txt = Entry(window,width=10)
txt.grid(column=1, row=0)

def clicked():
    res = "Welcome to " + txt.get()
    lbl.configure(text= res)

btn = Button(window, text="Click Me", command=clicked)
btn.grid(column=2, row=0)
window.mainloop()
```

## Example 3

```
from tkinter import *
from tkinter.ttk import *
window = Tk()
window.title("Welcome to GUI app")
selected = IntVar() # create integer variable
rad1 = Radiobutton(window,text='First', value=1, variable=selected)
rad1.grid(column=0, row=0)
rad2 = Radiobutton(window,text='Second', value=2, variable=selected)
rad2.grid(column=1, row=0)
rad3 = Radiobutton(window,text='Third', value=3, variable=selected)
rad3.grid(column=2, row=0)
def clicked():
 print(selected.get())
btn = Button(window, text="Click Me", command=clicked)
btn.grid(column=3, row=0)
window.mainloop()
```

#### Example 3

import tkinter.messagebox import tkinter.simpledialog import tkinter.colorchooser

tkinter.messagebox.showwarning("showwarning", "This is a warning")

tkinter.messagebox.showerror("showerror", "This is an error")

isYes = tkinter.messagebox.askyesno("askyesno", "Continue?") print(isYes)

isOK = tkinter.messagebox.askokcancel("askokcancel", "OK?")
print(isOK)

isYesNoCancel = tkinter.messagebox.askyesnocancel("askyesnocancel", "Yes, No, Cancel?") print(isYesNoCancel)

name = tkinter.simpledialog.askstring("askstring", "Enter your name")
print(name)

age = tkinter.simpledialog.askinteger("askinteger", "Enter your age")
print(age)

weight = tkinter.simpledialog.askfloat("askfloat", "Enter your weight")
print(weight)

















## Example 4

```
from tkinter import *
from tkinter import ttk
from tkinter import messagebox
window = Tk()
window.title("Welcome to TutorialsPoint")
window.geometry('400x400')
window.configure(background = "grey");
a = Label(window ,text = "First Name").grid(row = 0,column = 0)
a1 = Entry(window).grid(row = 0,column = 1)
b = Label(window ,text = "Last Name").grid(row = 1,column = 0)
b1 = Entry(window).grid(row = 1,column = 1)
c = Label(window ,text = "Email Id").grid(row = 2,column = 0)
c1 = Entry(window).grid(row = 2,column = 1)
d = Label(window ,text = "Contact Number").grid(row = 3,column = 0)
d1 = Entry(window).grid(row = 3,column = 1)
def ThankYou():
  messagebox.showinfo("Submited", "Thank You!")
btn = ttk.Button(window, text="Submit", command=ThankYou).grid(row=4,column=0)
window.mainloop()
```

