

Basic tkinter

Wiki: **Tkinter** is a **Python** binding to the Tk GUI toolkit. It is the standard **Python** interface to the Tk GUI toolkit, and is **Python's** standard GUI. **Tkinter** is included with standard Linux, Microsoft Windows and Mac OS X installs of **Python**. The name **Tkinter** comes from Tk interface.

So lets start your first tkinter program (this will run on both repl and pycharm)

See program:

```
from tkinter import*
```

```
#first line of every tkinter  
root = Tk()
```

```
#how to output text in a gui window
```

```
#step 1 define  
text1 = Label(root,text = "hello world")
```

```
#step2 place it on the window, using in this case the grid system  
#note that the grid system does not really com into play until we  
#have other things outputting to the screen  
text1.grid(row = 0, column = 0)
```

```
#last line of every tkinter  
root.mainloop()
```

root = Tk() The **root** window is created. The **root** window is a main application window in our programs. It has a title bar and borders. (zetcode)

root.mainloop() is a method on the main window which we execute when we want to run our application. This method will loop forever, waiting for events from the user, until the user exits the program – either by closing the window, or by terminating the program with a keyboard interrupt in the console. (python-course.eu)

As you can see, we define then we place on window with grid system (we have decided to stick with the grid system. We can also use “pack” to place things on the grid)

To output buttons we could run the following program:

```
from tkinter import*  
root = Tk()
```

```
# define button (this button will do nothing but you can click on it)  
button_1 = Button(root, text="process")
```

```
# put buttons on the screen by row and column  
button_1.grid(row=0, column=0)
```

```
root.mainloop()
```

Ok. Having done this we can assign an action to our button by writing a procedure (or a function)

See program:

```
from tkinter import*
root = Tk()
#defining our Label but only outputting it unit we click button
text1 = Label(root,text = "hello world")

#we have written a procedure called buttonClick
def buttonClick():
    #print to console
    print("hello world")
    #print to window
    text1.grid(row=0, column=0)

    return

# define buttons, however, we've added the parameter "command = buttonClick" with no parentheses
button_1 = Button(root, text="process", command = buttonClick) # keep prenteses off

# put buttons on the screen by row and column
button_1.grid(row=1, column=0)

root.mainloop()
```