

Python

GUI

Plan the window

Layout the Window

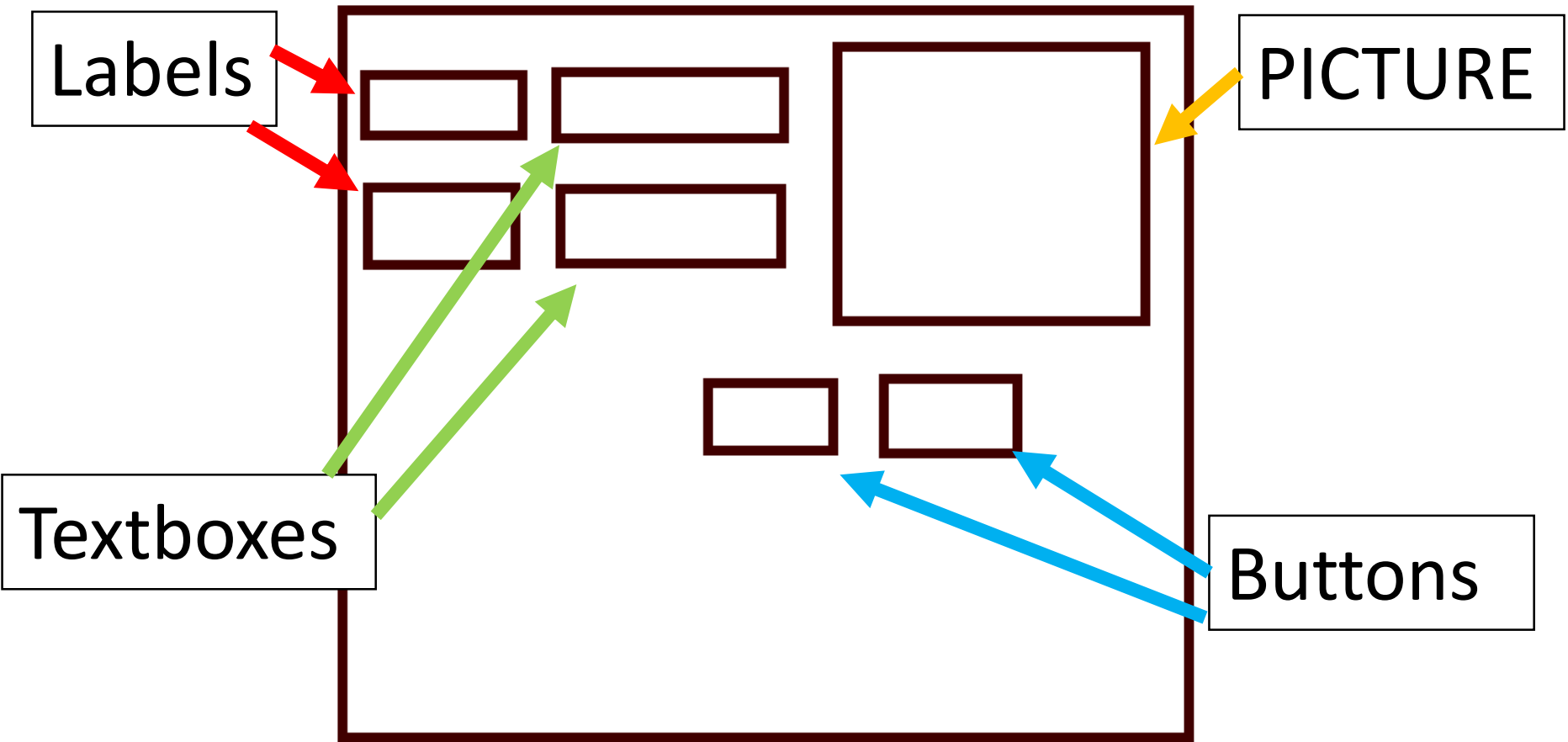
Where the

Buttons, labels

Textboxes and

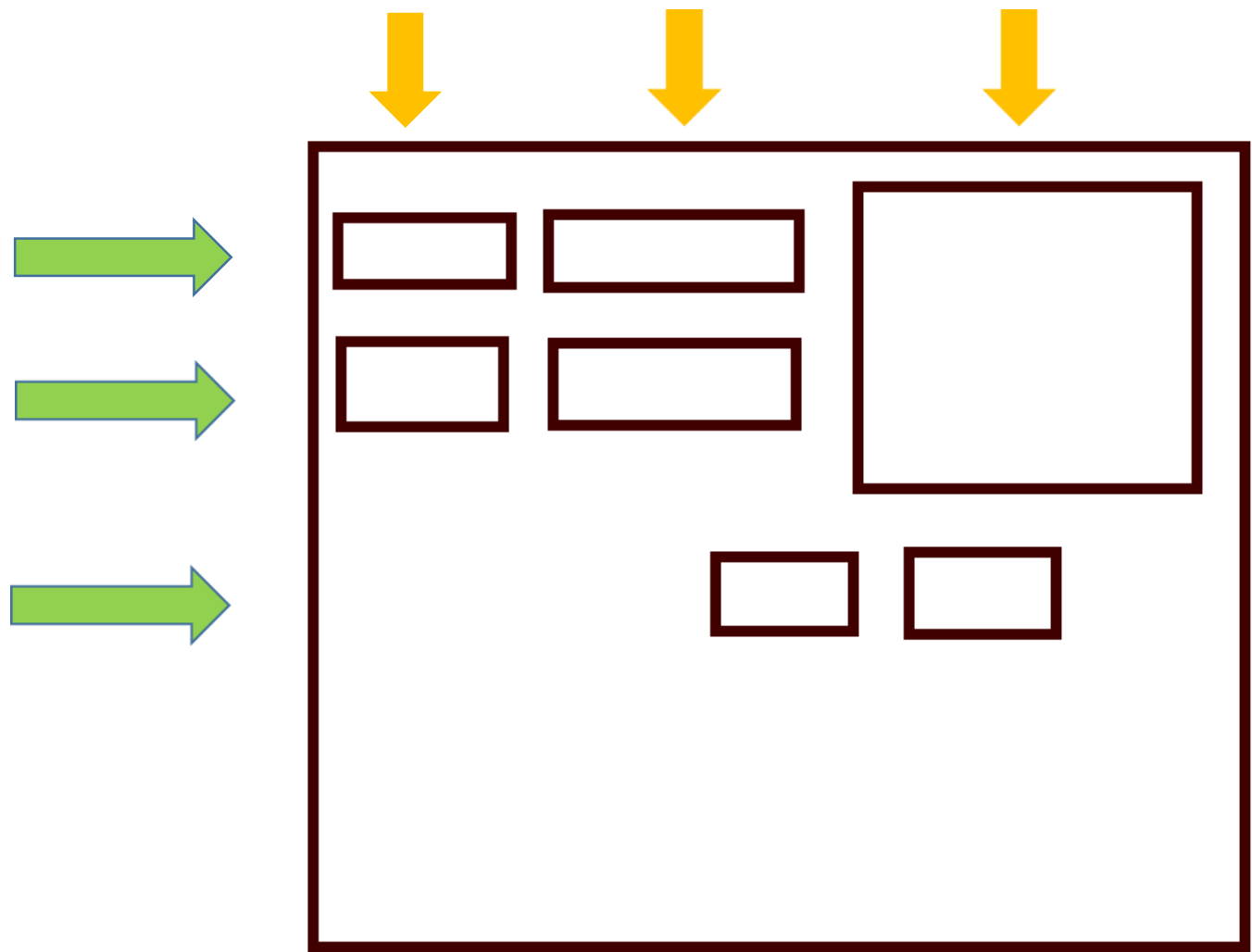
Pictures will be

Window design

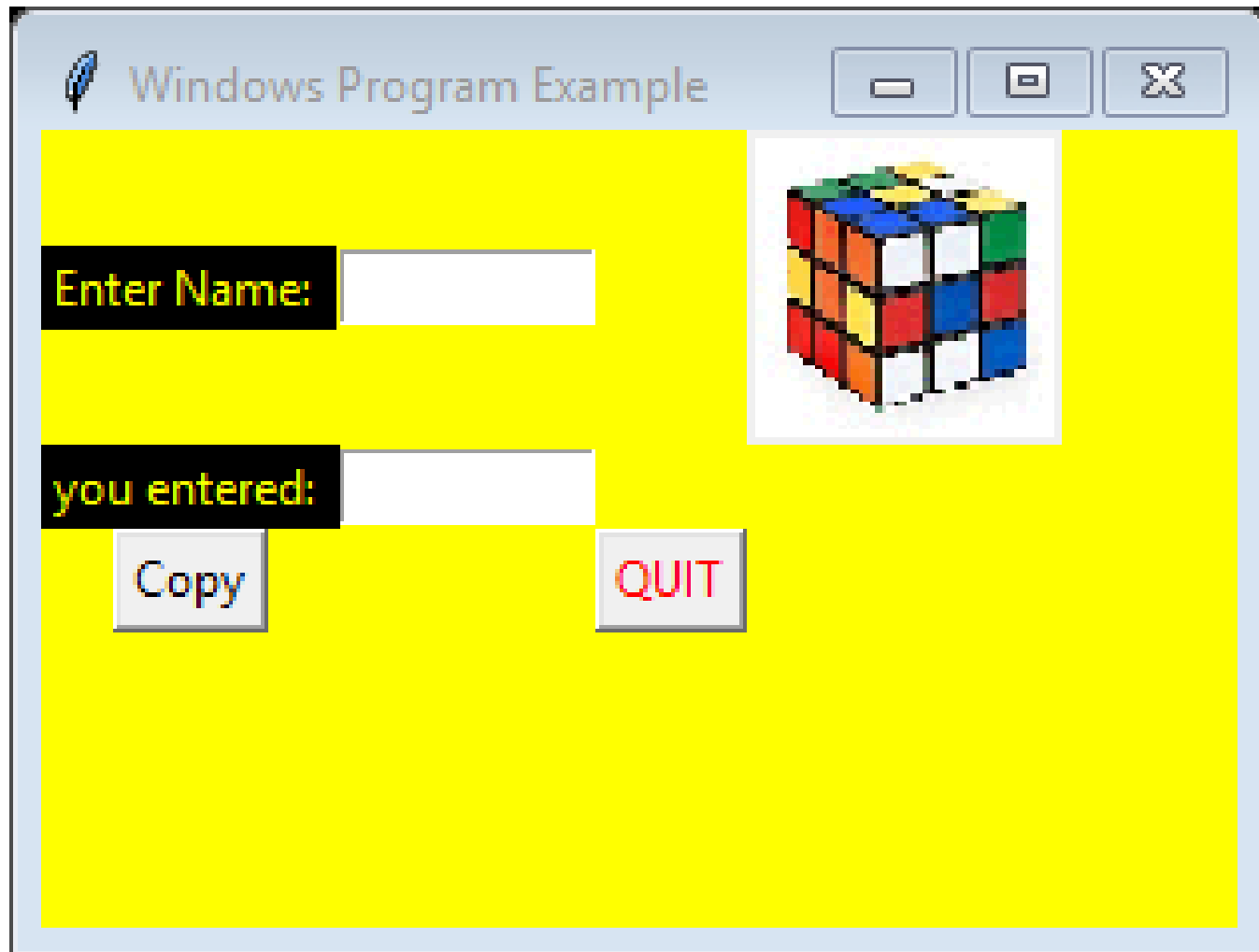


Grid: Row & Column

ROW
COLUMN



When Finished



CODE

Multiple Slides

Type in carefully

Be sure to test program

```
import tkinter

def movit(txtbox,txtbox2):
    txtbox2.insert(0,txtbox.get())
    return

def clrit(txtbox,txtbox2):
    txtbox.delete(0,"end")
    txtbox2.delete(0,"end")
    return
```

```
def createwindow():  
    mainwin = tkinter.Tk()  
    mainwin.title("Windows Program Example")  
    mainwin.geometry('300x200')  
    mainwin["bg"] = 'yellow'  
    txt = tkinter.Label(mainwin,  
                        text="Python Window Program",  
                        fg = "red")  
    return (mainwin,txt)
```



```
def labeltxt(mainwin):  
    txtboxlbl = tkinter.Label(mainwin,  
        text="Enter Name: ",  
        fg = "yellow",  
        bg = 'black')  
    txtboxlbl.grid(row=0,column=0)  
    txtbox = tkinter.Entry(mainwin,width=10)  
    txtbox.grid(row=0,column=1)  
    return (txtboxlbl,txtbox)
```

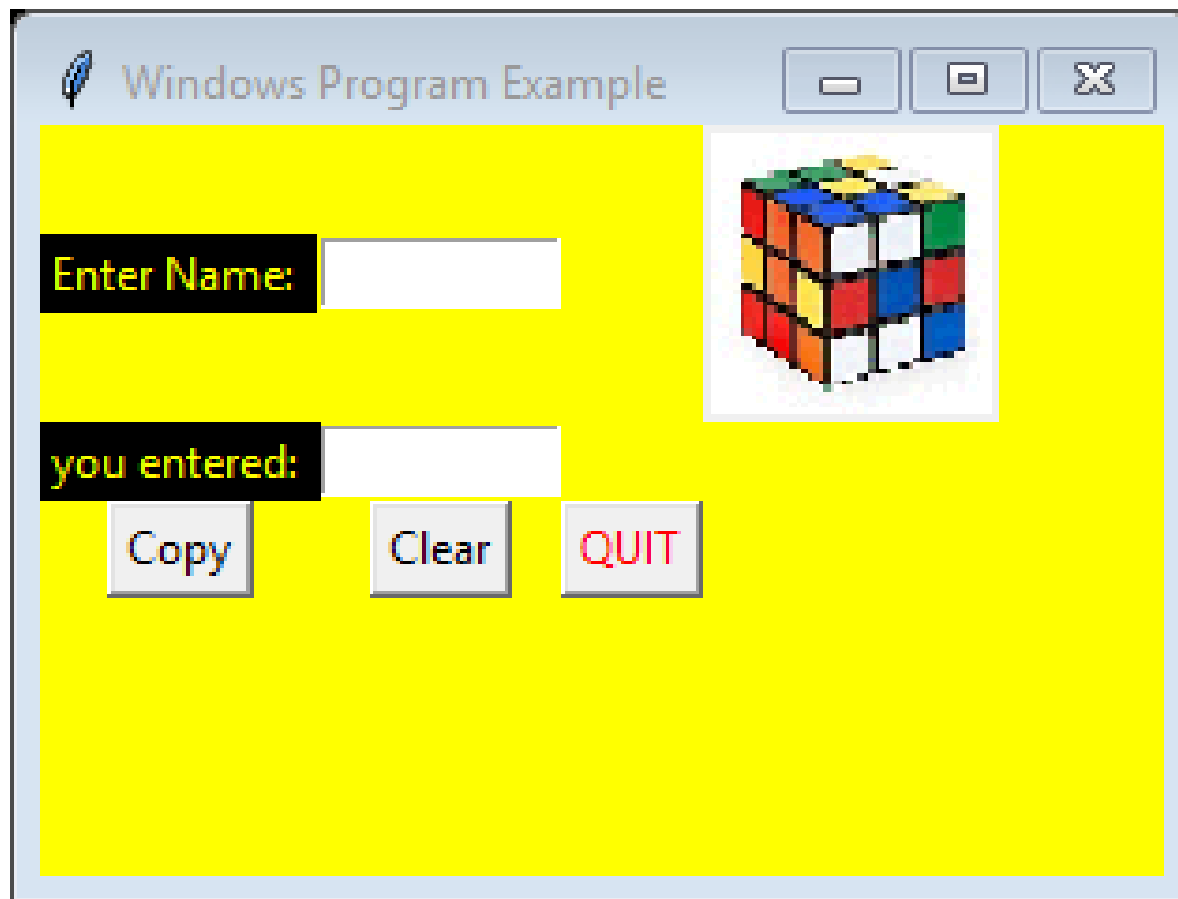
```
def labeltxt2(mainwin):  
    txtboxlbl2 = tkinter.Label(mainwin,  
                                text="you entered: ",  
                                fg = "yellow",  
                                bg = 'black')  
    txtboxlbl2.grid(row=1,column=0)  
    txtbox2 = tkinter.Entry(mainwin,width=10)  
    txtbox2.grid(row=1,column=1)  
    return (txtboxlbl2,txtbox2)
```

```
def btns(mainwin,txtbox,txtbox2):  
    cmdcopy = tkinter.Button(mainwin,  
        text="Copy",  
        command=lambda : movit(txtbox,txtbox2))  
    cmdcopy.grid(row=4,column=0)  
    cmdclear = tkinter.Button(mainwin,  
        text="Clear",  
        command=lambda : clrit(txtbox,txtbox2))  
    cmdclear.grid(row=4,column=1)  
    cmdquit = tkinter.Button(mainwin,  
        text="QUIT",  
        fg="red",  
        command=quit)  
    cmdquit.grid(row=4,column=2)  
    return (cmdquit,cmdcopy,cmdclear)
```

```
def main():  
    (mainwin,txt) = createwindow()  
    (txtboxlbl,txtbox) = labeltxt(mainwin)  
    (txtboxlbl2,txtbox2) = labeltxt2(mainwin)  
    (cmdquit,cmdcopy,cmdclear)=btns(mainwin,txtbox,txtbox2)  
    pic1=tkinter.PhotoImage(file="square.gif")  
    txt2=tkinter.Label(mainwin,image=pic1).grid(row=0, column=7)  
    tkinter.mainloop()  
main()
```

Run the Program

Get This:



Whole program

```
import tkinter
```

```
def movit(txtbox,txtbox2):  
    txtbox2.insert(0,txtbox.get())  
    return
```

```
def clrit(txtbox,txtbox2):  
    txtbox.delete(0,"end")  
    txtbox2.delete(0,"end")  
    return
```

```
def createwindow():  
    mainwin = tkinter.Tk()  
    mainwin.title("Windows Program Example")  
    mainwin.geometry('300x200')  
    mainwin["bg"] = 'yellow'  
    txt = tkinter.Label(mainwin,  
        text="Python Window Program",  
        fg = "red")  
    return (mainwin,txt)
```

```
def labeltxt(mainwin):  
    txtboxlbl = tkinter.Label(mainwin,  
        text="Enter Name: ",  
        fg = "yellow",  
        bg = 'black')  
    txtboxlbl.grid(row=0,column=0)  
    txtbox = tkinter.Entry(mainwin,width=10)  
    txtbox.grid(row=0,column=1)  
    return (txtboxlbl,txtbox)
```

```
def labeltxt2(mainwin):  
    txtboxlbl2 = tkinter.Label(mainwin,  
        text="you entered: ",  
        fg = "yellow",  
        bg = 'black')  
    txtboxlbl2.grid(row=1,column=0)  
    txtbox2 = tkinter.Entry(mainwin,width=10)  
    txtbox2.grid(row=1,column=1)  
    return (txtboxlbl2,txtbox2)
```

```
def btns(mainwin,txtbox,txtbox2):  
    cmdcopy = tkinter.Button(mainwin,  
        text="Copy",  
        command=lambda : movit(txtbox,txtbox2))  
    cmdcopy.grid(row=4,column=0)  
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    cmdclear.grid(row=4,column=1)  
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        text="QUIT",  
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        command=quit)  
    cmdquit.grid(row=4,column=2)  
    return (cmdquit,cmdcopy,cmdclear)
```

```
def main():  
    (mainwin,txt) = createwindow()  
    (txtboxlbl,txtbox) = labeltxt(mainwin)  
    (txtboxlbl2,txtbox2) = labeltxt2(mainwin)  
    (cmdquit,cmdcopy,cmdclear)=btns(mainwin,txtbox,txtbox2)  
    pic1=tkinter.PhotoImage(file="square.gif")  
    txt2=tkinter.Label(mainwin,image=pic1).grid(row=0, column=7)  
    tkinter.mainloop()  
main()
```

Done