Tkinter

tkinter: Used for the pages in graphical disigning. Basic components of Tkinter are
1) Label: Single line information.
2) Entry: Single line textbox.
3) TextBox: multiline textbox.
4) Menu: options
5) Button: Used to submit the information.
6) Frame: overall structure in which we create or design.
7) CheckButton: Multiple input can be selected.
8) RadioButton: only one input can be selected.

There are 3 types of geometric structure
1) Grid - Rows and columns
2) Pack - automatically places the widget in the window based on the space available (organizes in vertical order)
3) place - (100,100) pixels form

```
# Label() Entry() Button()

import tkinter
from tkinter import *
r = Tk()


label1 = Label(r,text = "Name")
label1.grid(row = 0)

entry1= Entry(r)
entry1.grid(row = 0, column = 1)

label2 = Label(r,text = "Age")
label2.grid(row=1)
```

```
label4 = Label(r,text="State")
label4.grid(row = 4)

entry4 = Entry(r)
entry4.grid(row = 4 , column = 1)


button1= Button(r,text = "Submit",command = r.destroy)
button1.grid(row = 5,column = 1)    # command = r.destory: is used to destory the tkinter generally used in sumbit button.


mainloop()
```

Tkinter

```
# CheckButton()
import tkinter
from tkinter import *
r = Tk()

var1 = IntVar()
check1= Checkbutton(r,text = "Python", variable = var1)
check1.grid(row = 1)

var2 = IntVar()
check2= Checkbutton(r,text= "Java", variable = var2)
check2.grid(row = 2)

var3 = IntVar()
check3 = Checkbutton(r, text = "C++" ,variable = var3)
check3.grid(row = 3)

button1 = Button(r,text = "submit")
button1.grid(row = 4, column= 1)
mainloop()

print(var1.get())
print(var2.get())
```

```
# RadioButton()
import tkinter
from tkinter import *

r = Tk()

var1 = IntVar()
radio1 = Radiobutton(r,text = "Btech",variable = var1,value = 1)
radio1.grid(row = 1)
radio2 = Radiobutton(r,text = "Bcomb", variable = var1 , value = 2)
radio2.grid(row = 2)
radio3 = Radiobutton(r,text= "Bsc", variable = var1, value =3)
radio3.grid(row = 3)

button1 = Button(r,text = "sumbit",command = r.destroy)
button1.grid(row = 4, column = 1)

mainloop()
```

Tkinter

```
# .pack() geometric view
import tkinter
from tkinter import *

r = Tk()

label1 = Label(r,text="Name")
button1= Button(r,text = "submit",command = r.destroy)

label1.pack()      # side is used to give specific position like top/bottom/left/right
button1.pack()
mainloop()
```

```
# top1 = Toplevel(r) = Used to create new window
# top1.geometry()  = Decide the size of the new label

import tkinter
from tkinter import *
r = Tk()

def SecondClick():
    top2 = Toplevel(r)
    label3 = Label(top2, text = "Thrid window")
    label3.pack()
    button3 = Button(top2,text = "submit",command = top2.destroy)
    button3.pack()

def clicked():
    top1 = Toplevel(r)
    top1.geometry("100x100")             # fixed the size of the new window
    label2 = Label(top1, text = "second window op")
    label2.pack()
    button2 = Button(top1,text = "submit",command = SecondClick)
```

```
# Adding  menu to the tkinter
import tkinter
from tkinter import *

r = Tk()
mymenubar = Menu(r)
r.config(menu=mymenubar)
file = Menu(mymenubar)

mymenubar.add_cascade(label="file",menu= file)
file.add_command(label = "save")
file.add_command(label = "save as")

operations = Menu(mymenubar)

mymenubar.add_cascade(label = "Operations",menu = operations)
operations.add_command(label = "cut")
operations.add_command(label = "copy")
operations.add_command(label = "paste")

mainloop()
```