Tkinter Cheat Sheet

The most popular GUI creation tool for Python, Tkinter provides a number of widgets and methods you can use to create a user interface for your application.

Tkinter Widgets

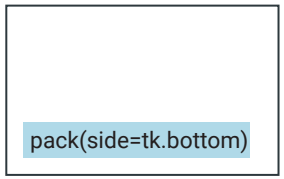
Code	from tkinter import *	from tkinter import * from tkinter.ttk import *

Widgets	Button
	`instance = Button(root, text="Click me!", ...)`
	
	Checkbutton
	`instance = tk.Checkbutton(parent, option, ... )`
	
	Entry
	`instance = tk.Entry(master, option, ...)`
	
	Frame
	`instance = Frame(parent, option, ...)`
	
	Label
	`instance = tk.Label(text="some text")`
	
	LabelFrame
	`instance = LabelFrame( master, option, ... )`
	
	Menubutton
	`instance = Menubutton ( master, options, ... )`
	
	PanedWindow
	`instance = PanedWindow(master, options, ... )`
	
	Radiobutton
	`instance = Radiobutton(master, options, ... )`
	
	Scale
	`instance = Scale (master, option, ... )`
	
	Scrollbar
	`instance = Scrollbar ( master, options, ... )`
		Combobox
		`instance = ttk.Combobox(master, option=value, ...)`
		
		Notebook
		`instance = ttk.Notebook(container, options, ... )`
		
		Progressbar
		`instance = Progressbar(parent, options, ... )`
		
		Separator
		`# orient options are 'horizontal' or 'vertical':`
		`instance = ttk.Separator(container,orient='horizontal')`
		
		Sizegrip
		`instance = ttk.Sizegrip(master, options, ... )`
		
		Treeview
		`instance = ttk.Treeview(master, options, ... )`

Position Widgets using `pack()`, `place()` or `grid()`

`pack()` organizes widgets in horizontal and vertical boxes that are limited to left, right, top, bottom positions. Each box is offset and relative to each other.

```
root.geometry('200x100')
test = tk.Label(root, text="pack(side=tk.bottom)", bg="teal")
test.pack(side=tk.bottom)
```



Options:

`padx` pads externally along the x axis
`pady` pads externally along the y axis
`ipadx` pads internally along the x axis
`ipady` pads internally along the y axis

`place()` places widgets in a two dimensional grid using x and y absolute coordinates.

```
root.geometry('200x100')
Label(root, text="place(x=5, y=2)",
bg="#A3DBE0").place(x=5, y=2)
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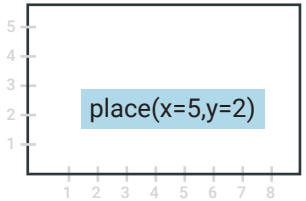

`grid()` locates widgets in a two dimensional grid using row and column absolute coordinates.

```
root.geometry('200x100')
Label(root, text="grid(row=2, column=2)",
width=12).grid(row=2, column=2)
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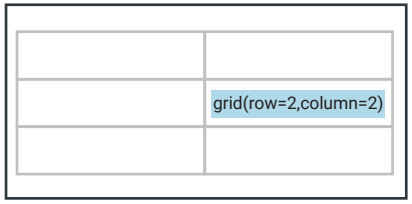

Tkinter Images with Pillow

```
# Pillow is imported as PIL
from PIL import ImageTk, Image

image1 = Image.open("<path/image_name>")
test = ImageTk.PhotoImage(image1)

label1 = tkinter.Label(image=test)
label1.image = test

# Position image as the background image
label1.place(x=1, y=1)
# Resize image to fit on button
photoimage = photo.subsample(1, 2)
# Position image on button
Button(root, image = photoimage,).pack(side = BOTTOM)
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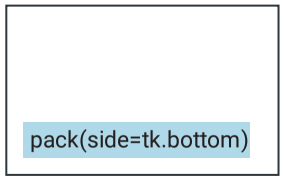

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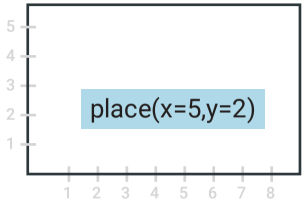

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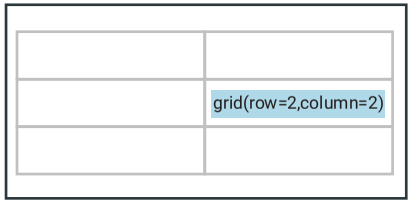

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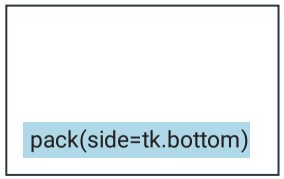

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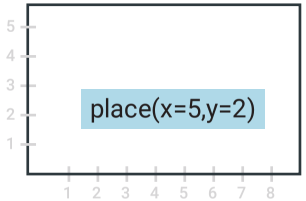

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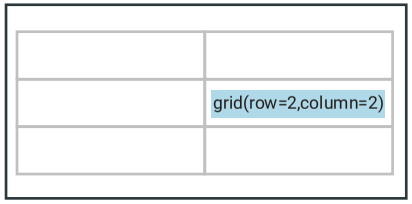

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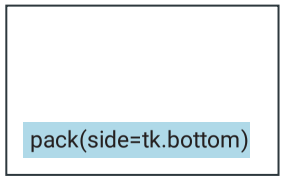

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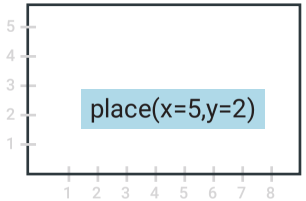

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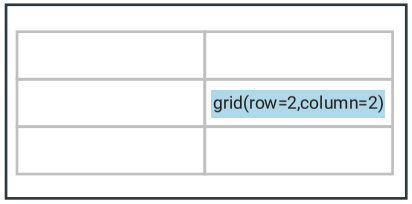

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