Python - Tkinter Button

The Button widget is used to add buttons in a Python application. These buttons can display text or images that convey the purpose of the buttons. You can attach a function or a method to a button which is called automatically when you click the button.

Syntax

Here is the simple syntax to create this widget −

```
w = Button ( master, option=value, ... )
```

Parameters

- **master** − This represents the parent window.

- **options** − Here is the list of most commonly used options for this widget. These options can be used as key-value pairs separated by commas.

Sr.No.	Option & Description
1	**activebackground** Background color when the button is under the cursor.
2	**activeforeground** Foreground color when the button is under the cursor.
3	**bd** Border width in pixels. Default is 2.
4	**bg** Normal background color.
5	**command** Function or method to be called when the button is clicked.
6	**fg** Normal foreground (text) color.
7	**font** Text font to be used for the button's label.
8	**height** Height of the button in text lines (for textual buttons) or pixels (for images).
9	**highlightcolor** The color of the focus highlight when the widget has focus.
10	**image** Image to be displayed on the button (instead of text).
11	**justify**

	How to show multiple text lines: LEFT to left-justify each line; CENTER to center them; or RIGHT to right-justify.
12	**padx** Additional padding left and right of the text.
13	**pady** Additional padding above and below the text.
14	**relief** Relief specifies the type of the border. Some of the values are SUNKEN, RAISED, GROOVE, and RIDGE.
15	**state** Set this option to DISABLED to gray out the button and make it unresponsive. Has the value ACTIVE when the mouse is over it. Default is NORMAL.
16	**underline** Default is -1, meaning that no character of the text on the button will be underlined. If nonnegative, the corresponding text character will be underlined.
17	**width** Width of the button in letters (if displaying text) or pixels (if displaying an image).
18	**wraplength** If this value is set to a positive number, the text lines will be wrapped to fit within this length.

Methods

Following are commonly used methods for this widget −

Sr.No.	Method & Description
1	**flash()** Causes the button to flash several times between active and normal colors. Leaves the button in the state it was in originally. Ignored if the button is disabled.
2	**invoke()** Calls the button's callback, and returns what that function returns. Has no effect if the button is disabled or there is no callback.

Example

Try the following example yourself −

```python
import Tkinter
import tkMessageBox

top = Tkinter.Tk()

def helloCallBack():
    tkMessageBox.showinfo( "Hello Python", "Hello World")

B = Tkinter.Button(top, text ="Hello", command = helloCallBack)

B.pack()
top.mainloop()
```

When the above code is executed, it produces the following result −