In [ ]:
```
# Program 1
import tkinter
window = tkinter.Tk()
# to rename the title of the window
window.title("My Greetings")
# pack is used to show the object in the window
label = tkinter.Label(window, text = "Assalam O Alekum \n Welcome to UIT!").

window.mainloop()
```

In [1]:
```
# Program 2
import tkinter
window = tkinter.Tk()
window.title("Two Frames with Widgets")

# creating 2 frames TOP and BOTTOM
top_frame = tkinter.Frame(window).pack()
bottom_frame = tkinter.Frame(window).pack(side = "bottom")

# now, create some widgets in the top_frame and bottom_frame
btn1 = tkinter.Button(top_frame, text = "Button", fg = "red").pack()

#'fg - foreground' is used to color the contents
btn2 = tkinter.Button(top_frame, text = "Button2", fg = "green").pack()

# 'text' is used to write the text on the Button
btn3 = tkinter.Button(bottom_frame, text = "Button2", fg = "purple").pack(si

# 'side' is used to align the widgets
btn4 = tkinter.Button(bottom_frame, text = "Button2", fg = "orange").pack(si
"orange"
window.mainloop()
```

In [8]:
```
# Program 3
import tkinter
window = tkinter.Tk()
window.title("Playing with GUI")

# creating 3 simple Labels containing some text
# sufficient width
tkinter.Label(window, text = "Sufficient width", fg = "white", bg = "purple"

# width of X
tkinter.Label(window, text = "Taking all available X width", fg = "white", b

# height of Y
tkinter.Label(window, text = "Taking all available Y height", fg = "white",

window.mainloop()
```

In [ ]:

```
# Program 4
import tkinter
window = tkinter.Tk()
window.title("My Login Window")

# creating 2 text labels and input labels
tkinter.Label(window, text = "Username").grid(row = 0)
# this is placed in 0 0

# 'Entry' is used to display the input-field
tkinter.Entry(window).grid(row = 0, column = 1)

# this is placed in 0 1
tkinter.Label(window, text = "Password").grid(row = 1) # this is placed in 1
tkinter.Entry(window).grid(row = 1, column = 1)

# this is placed in 1 1
# 'Checkbutton' is used to create the check buttons
tkinter.Checkbutton(window, text = "Keep Me Logged In").grid(columnspan = 2)


# 'columnspan' tells to take the width of 2 columns
# you can also use 'rowspan' in the similar manner
window.mainloop()
```

In [1]:

```
# Program 4(b)
import tkinter
window = tkinter.Tk()
window.title("Binding Functions")

# creating a function called say_Assalam_o_Alekum()
def say_Assalam_o_Alekum():
    tkinter.Label(window, text = "Assalam o Alekum").pack()
    tkinter.Button(window, text = "Click Me!", command =say_Assalam_o_Alekum
say_Assalam_o_Alekum()

# 'command' is executed when you click the button
#in this above case we're calling the function 'say_Assalam_o_Alekum'.

window.mainloop()
```

In [2]:
```
# Program 5
import tkinter
window = tkinter.Tk()
window.title("Capturing the Mouse Events on GUI")

#creating 3 different functions for 3 events
def left_click(event):
    tkinter.Label(window, text = "Left Click!").pack()
left_click('event')
def middle_click(event):
    tkinter.Label(window, text = "Middle Click!").pack()
middle_click('event')
def right_click(event):
    tkinter.Label(window, text = "Right Click!").pack()
right_click('event')
window.bind("<Button-1>", left_click)
window.bind("<Button-2>", middle_click)
window.bind("<Button-3>", right_click)

window.mainloop()
```

In [1]:
```
# Program 7
import tkinter
window = tkinter.Tk()
window.title("My GUI with Menu")
def function():
    pass
# creating a root menu to insert all the sub menus
root_menu = tkinter.Menu(window)
window.config(menu = root_menu)

# creating sub menus in the root menu
file_menu = tkinter.Menu(root_menu)
# it intializes a new su menu in the root menu
root_menu.add_cascade(label = "File", menu = file_menu)
# it creates the name of the sub menu
file_menu.add_command(label = "New file.....", command = function)
#it adds a option to the sub menu 'command' parameter is used to do some act
file_menu.add_command(label = "Open files", command = function)
file_menu.add_separator()
# it adds a line after the 'Open files' option
file_menu.add_command(label = "Exit", command = window.quit)
# creting another sub menu
edit_menu = tkinter.Menu(root_menu)
root_menu.add_cascade(label = "Edit", menu = edit_menu)
edit_menu.add_command(label = "Undo", command = function)
edit_menu.add_command(label = "Redo", command = function)
window.mainloop()
```

In [4]:
```
# Program 8
import tkinter
import tkinter.messagebox
window = tkinter.Tk()
window.title("Alert Message GUI")
# creating a simple alert box
tkinter.messagebox.showinfo("Alert Message", "This is just a alert message!"

# creating a question to get the response from the user [Yes or No Question]

response = tkinter.messagebox.askquestion("Simple Question", "Do you love Py

# If user clicks 'Yes' then it returns 1 else it returns 0
if response == 1:
    tkinter.Label(window, text = "You love Python!").pack()
else:
    tkinter.Label(window, text = "You don't love Python!").pack()
window.mainloop()
```

In [ ]:
```
# Program 9
import tkinter
window = tkinter.Tk()
window.title("Sahpes on your GUI")
# creating the 'Canvas' area of width and height 500px
canvas = tkinter.Canvas(window, width = 500, height = 500)
canvas.pack()
# 'create_line' is used to create a line. Parameters:- (starting x-point, st
line1 = canvas.create_line(25, 25, 250, 150)
# parameter:- (fill = color_name)
line2 = canvas.create_line(25, 250, 250, 150, fill = "red")
# 'create_rectangle' is used to create rectangle. Parameters:-(starting x-po
# starting point the coordinates of top-left point of rectangle
rect = canvas.create_rectangle(500, 25, 175, 75, fill = "green")
# you 'delete' shapes using delete method passing the name of the variable a
canvas.delete(line1)
# you 'delete' all the shapes by passing 'ALL' as parameter to the 'delete'
# canvas.delete(tkinter.ALL)
window.mainloop()
```

In [5]:
```
# Program 10
import tkinter
window = tkinter.Tk()
window.title("Image or Logo on GUI")
# taking image from the directory and storing the source in a variable
icon = tkinter.PhotoImage(file = "09.jpg")
# displaying the picture using a 'Label' by passing the 'picture' variriable
label = tkinter.Label(window, image = icon)
label.pack()
window.mainloop()
```

```
---------------------------------------------------------------------------
TclError                                  Traceback (most recent call last)
<ipython-input-5-4d354c88a121> in <module>
      4 window.title("Image or Logo on GUI")
      5 # taking image from the directory and storing the source in a variable
----> 6 icon = tkinter.PhotoImage(file = "09.jpg")
      7 # displaying the picture using a 'Label' by passing the 'picture' varir
iable to 'image' parameter
      8 label = tkinter.Label(window, image = icon)

~\uit\lib\tkinter\__init__.py in __init__(self, name, cnf, master, **kw)
   3543         Valid resource names: data, format, file, gamma, height, palett
e,
   3544         width."""
-> 3545         Image.__init__(self, 'photo', name, cnf, master, **kw)
   3546     def blank(self):
   3547         """Display a transparent image."""

~\uit\lib\tkinter\__init__.py in __init__(self, imgtype, name, cnf, master, **k
w)
   3499                 v = self._register(v)
   3500             options = options + ('-'+k, v)
-> 3501         self.tk.call(('image', 'create', imgtype, name,) + options)
   3502         self.name = name
   3503     def __str__(self): return self.name

TclError: couldn't open "09.jpg": no such file or directory
```

In [ ]:
```
# program 6
import tkinter
class MyGUI:
    def init(self, window):
        self.text_btn = tkinter.Button(window, text = "Click Me!",  command
        self.text_btn.pack()
        self.close_btn = tkinter.Button(window, text = "Close", command = wi
        self.close_btn.pack()
    init('self', 'window')
    def say_greetings(self):
        tkinter.Label(window, text = "Welcome to Usman Institute of Technolo
    say_greetings('self')
window = tkinter.Tk()
window.title("GUI with Class Concept")
my_gui = MyGUI(window)
window.mainloop()
```

In [ ]:
```
1
```