Q1.Create a simple tkinter application to display a welcome message in a window using the label widget.

In [1]:
```
from tkinter import *
window = Tk()
label=Label(window,text='Welcome to Tkinter')
label.grid(row=0,column=2)
window.mainloop()
```

In [ ]:

Q2.Create tkinter application to accept user name in a text widget. Then display the user name with a welcome message in a label widget

In [4]:
```
from tkinter import *
window = Tk()
def accept():
    name = str(t.get(1.0,'end-1c'))
    l.config(text='Welcome '+ str(name))
    print('Successfully Printed ')
t = Text(window,height=5,width=20)
t.pack()
l= Label(window)
l.pack()
b = Button(window,text='Click',command=accept)
b.pack()
window.mainloop()
```

```
Successfully Printed
```

In [ ]:

Q3.Modify the tkinter application developed in Q.No. 2 so that it uses a grid layout

In [5]:
```
from tkinter import *
window = Tk()
def accept():
    name = str(t.get(1.0,'end-1c'))
    l.config(text='Welcome '+ str(name))
    print('Successfully Printed ')


t = Text(window,height=5,width=20)
t.grid(row=0,column=0)
l= Label(window)
l.grid(row=1,column=0)
b = Button(window,text='Click',command=accept)
b.grid(row=2,column=0)
window.mainloop()
```

```
Successfully Printed
```

In [ ]:

Q4.Create a tkinter application to accept radius of a circle and display the area.

In [6]:
```
from tkinter import *
window = Tk()

def area():
    convert = float(e.get())
    ar = (convert**2)*3.14
    t.delete('1.0',END)
    t.insert(END,ar)
    print("Printed Successfully!")\

l1 = Label(window,text='Enter the radius of circle:')
l1.grid(row=0,column=0)
e = StringVar()
e1 = Entry(window,textvariable=e)
e1.grid(row=0,column=1)
l2 = Label(window,text='Area of circle:')
l2.grid(row=1,column=0)
t = Text(window,height = 3,width = 20)
t.grid(row=1,column=1)
b = Button(window,text='Display',command=area)
b.grid(row=2,column=1)
window.mainloop()
```

```
Printed Successfully!
```

In [ ]:

Q5.Create a tkinter application to accept temperature in Celsius and convert and display the temperature in Fahrenheit.

In [12]:
```
from tkinter import *
window = Tk()

def celsius():
    n_celsius = float(a.get())
    faren = (in_celsius*(9/5))+32
    t.delete('1.0',END)
    t.insert(END,faren)
    print('Successfully Converted!')
l = Label(window,text='Temperature in celsius:')
l.grid(row=0,column=0)
a = StringVar()
e = Entry(window,textvariable=a)
e.grid(row=0,column=1)
l1 = Label(window,text='Temperature in Fahrenheit:')
l1.grid(row=2,column=0)
t = Text(window,height=2,width=10)
t.grid(row=2,column=1)
b = Button(window,text='Convert',command=celsius)
b.grid(row=3,column=1)
window.mainloop()
```

In [ ]:

Q6.Create a tkinter application to accept distance in kilometers and convert and display distance in miles.

In [13]:
```
from tkinter import *
window = Tk()
def km_to_miles():
    miles = float(km.get())*1.609
    t.delete('1.0',END)
    t.insert(END,miles)
    print('Successfully Converted!')

l1 = Label(window,text='Distance in Kilometers:')
l1.grid(row=0,column=0)
km = StringVar()
e = Entry(window,textvariable=km)
e.grid(row=0,column=1)
l2 = Label(window,text='Distance in miles:')
l2.grid(row=1,column=0)
t = Text(window,height=1,width=20)
t.grid(row=1,column=1)
b = Button(window,text='Convert',command=km_to_miles)
b.grid(row=2,column=1)
window.mainloop()
```

```
Successfully Converted!
```

In [ ]:

Q7.Create a tkinter application to display a menu with three items. A separate message should be display when each of the three menu items is clicked.

In [14]:
```
from tkinter import *
window = Tk()
def option1():
    l1 = Label(window,text='File Opened')
    l1.pack()

def option2():
    l2 = Label(window,text='File Saved')
    l2.pack()
def option3():
    l3 = Label(window,text='File CLosed')
    l3.pack()

m = Menu(window)
file1 = Menu(m)
file1.add_command(label='Open',command=option1)
file1.add_separator()
file1.add_command(label='Save',command=option2)
file1.add_command(label='Exit',command=option3)
file1.add_separator()
m.add_cascade(label='File',menu=file1)
window.config(menu=m)
window.mainloop()
```

In [ ]:

Q8.Create a tkinter application to display a radio button group with three items. A separate message should be display when each of the three radio buttons items is clicked.

In [16]:
```
from tkinter import *
window = Tk()
def sel():
    selection = "You selected the item  " + str(var.get())
    label.config(text=selection)

var = IntVar()
R1 = Radiobutton(window,text='Item 1',variable = var, value=1,command=sel)
R1.pack()
R2 = Radiobutton(window,text='Item 2',variable = var, value=2,command=sel)
R2.pack()
R3 = Radiobutton(window,text='Item 3',variable = var, value=3,command=sel)
R3.pack()
label = Label(window)
label.pack()
window.mainloop()
```

In [ ]:

Q9.Create a tkinter application to display three check boxes. A separate message should be display when each of the three check boxes items is selected.

In [1]:
```
from tkinter import *
window = Tk()

def item1():
    if(Check1.get() == 1):
        selection = 'You selected the option python programming'
    else:
        selection = 'You de-selected the option python programming'
    label.config(text=selection)
def item2():
    if(Check2.get() == 1):
        selection = 'You selected the option Tkinter programming'

    else:
        selection = 'You de-selected the option Tkinter programming'
    label.config(text=selection)


def item3():
    if(Check3.get() == 1):
        selection = 'You selected Pandas'
    else:
        selection = 'You de-selected the Pandas Options'
    label.config(text=selection)

Check1 = IntVar()
Check2 = IntVar()
Check3 = IntVar()
C1 = Checkbutton(window,text='Python Programming',variable=Check1,onvalue=1,offvalue=0,height=5,width=20,command=item1)
C2 = Checkbutton(window,text='Tkinter',variable=Check2,onvalue=1,offvalue=0,height=5,width=20,command=item2)
C3 = Checkbutton(window,text='Pandas',variable=Check3,onvalue=1,offvalue=0,height=5,width=20,command=item3)
C1.pack()
C2.pack()
C3.pack()

label= Label(window)
label.pack()
window.mainloop()
```

In [ ]:

Q10.Create a tkinter application which contains a list box with five items. Whenever an item in the list box is selected, the item’s text should be displayed

In [25]:
```
from tkinter import *
window = Tk()
def my_upd():
    print(l1.get(ACTIVE))  # Get the ACTIVE / selected elements

l1= Listbox(window,height=5 )
l1.grid(row=1,column=1)
my_list=['tnkinter','numpy','pandas','python','Open-CV']
for element in my_list:
    l1.insert(END,element)

b1 = Button(window,text='Show',width=10,bg='green',command=my_upd)
b1.grid(row=1,column=2)
window.mainloop()
```

```
tnkinter
numpy
pandas
python
Open-CV
```

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