Two primary appraces that user has to follow after importing tkinter module

* + Tk() - used to make the main window
  + mainloop() - infinite loop that runs the application

Example -

from tkinter import \*

main\_window = Tk()

main\_window.mainloop()

**window Properties –**

main\_window.title(“”) - sets the title of the GUI application

main\_window.minsize(width= , height=) - sets the minimum size of the window

main\_window.maxsize(width = , height= ) – sets the maximum size of the window

main\_window.geometry(“height x width”) - sets the window startup size

**Widgets –**

Differrent types of widgets

* Label
* Button
* Entry
* Checkbutton
* Canvas

**Geometry configuration of widgets**

There are primarily 3 types of geometry manager classes

* Pack() – Used to place a widget at top
* Grid()-Used to organize the widget in table like structure
  + Attributes

.grid(row = , column = )

Places the widgets in the form of grid using the row and column as the attributes

* Place() – use to organize the widget at specific position
  + Attributes

.place(x = ,y= )

Uses the geometry placement of the widgets

**Types of widget**

* Label

Syntax – l1 = Label(window , opt=val)

Argument passed

* + Bg - sets the backaaground color of the label
  + Command -
  + Font - sets the font of the text in the label
  + Image -
  + Width - sets the width of the label
  + Height -sets the height of the label
  + Text – passes the text in the Label
  + Fg – font color
* PhotoImage

Syntax =

I = PhotoImage(file=””) // use forward slash in the location

L2 = Label(window , l).pack()

* Button

Syntax –

But = Button(main\_window , pro = val)

* + Bg
  + Fg
  + Width and height
* Entry

To take the input form the user in form of textbox

Syntax –

E1 = Entry(main\_window , )

* + Font
  + Width and height
  + Bd – border size

Problems

Get the text from the user and print in the label and console

Text

Description automatically generated

* Check Button –

Used to selection of choices as checkboxes

Syntax = cb = Checkbutton(main\_window , opt=val)

Arguments passes

* + title
  + bg
  + activebackground

Text

Description automatically generated

* Frame –

It serves as a container and used to organize the widgets

Syntax =

F1 = Frame(main\_window , opt=val)

Arguments that can be passed

* + bg
  + bd
  + cursor
  + width
  + height

Text

Description automatically generated

* ListBox

Used to give a user with list of options

Syntax –

Lb = Listbox(main\_window , opt=val)

Arguments to be passed

* + Bg
  + Bd
  + Font
  + Image
  + Width
  + Height

Problem – Create a list box and remove the selected item after clicking the button

Text

Description automatically generated