## tkinter

## layout manager and options

## pack()

**expand** — When set to true, widget expands to fill any space not otherwise used in widget's parent.

**fill** – Determines whether widget fills any extra space allocated to it by the packer, or keeps its own minimal dimensions: NONE (default), X (fill only horizontally), Y (fill only vertically), or BOTH (fill both horizontally and vertically).

**side** — Determines which side of the parent widget packs against: TOP (default), BOTTOM, LEFT, or RIGHT.

## grid()

**column**: This option is used to put the widget in a column that is leftmost column. The default column is 0.

**columnspan**: This option keeps track of how many columns it will take to occupy widgets, and by default, this is 1.

**ipadx** and **ipady**: These two options are used for how many pixels on the interface to pad the widgets in horizontal and vertical, respectively, but it will be used in padding inside the widgets border.

**padx** and **pady**: These two options are similar to the above options, but these are used to pad outside widget borders in horizontal and vertical padding the pixels.

row: This option is when the widget is to put in a row; by default, the first row is empty.

**rowspan**: This option will be used to tell how many rowwidgets are occupied, and the default value is 1.

**sticky**: What to do if the cell is larger than widget. By default, with sticky=", widget is centered in its cell. sticky may be the string concatenation of zero or more of N, E, S, W, NE, NW, SE, and SW, compass directions indicating the sides and corners of the cell to which widget sticks.