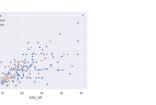
Relational plots relplot()

scatterplot() relplot(kind='scatter') Draw a scatter plot with possibility of several semantic groupings.











lineplot() relplot(kind='line')

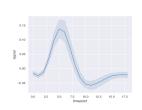
swarmplot() catplot(kind='swarm')

violinplot() catplot(kind='violin')

Draw a combination of boxplot and kernel density

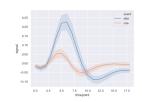
Draw a categorical scatterplot with non-overlapping

Draw a line plot with possibility of several semantic groupings.



points.

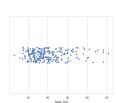
estimate (KDE).



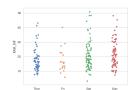
Categorical plots catplot()

stripplot() catplot(kind='strip')

Draw a scatterplot where one variable is categorical.

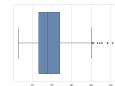


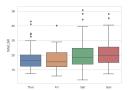
boxplot() catplot(kind='box')





Draw a box plot to show distributions with respect to categories.



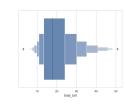


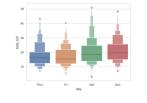
boxenplot() catplot(kind='boxen')

pointplot() catplot(kind='point')

using scatter plot glyphs.

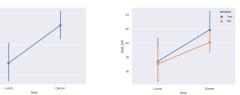
Draw an enhanced box plot for larger datasets.





barplot() catplot(kind='bar')

Show point estimates and confidence intervals as rectangular bars.

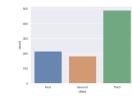


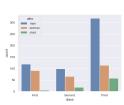


Show point estimates and confidence intervals

countplot() catplot(kind='count')

Show the counts of observations in each categorical bin using bars.

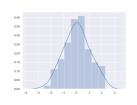




distplot()

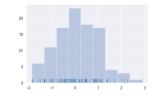
Flexibly plot a univariate distribution of observations.

Distribution plots





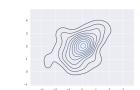
Plot datapoints in an array as sticks on an axis.



kdeplot()

Fit and plot a univariate or bivariate kernel density estimate.

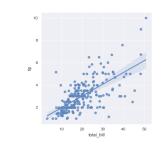


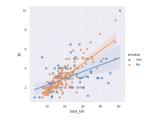


Regression plots

lmplot()

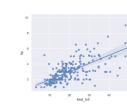
Plot data and regression model fits across a FacetGrid.





regplot()

Plot data and a linear regression model fit.



residplot()

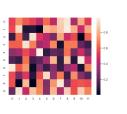
Plot the residuals of a linear regression.

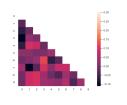


Matrix plots

heatmap()

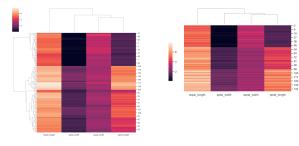
Plot rectangular data as a color-encoded matrix.





clustermap()

Plot a matrix dataset as a hierarchically-clustered heatmap.



Multi-plot grids

Facet grids

Initialize the matplotlib figure and FacetGrid object.

This class maps a dataset onto multiple axes arrayed in a grid of rows and columns that correspond to levels of variables in the dataset.

It can also represent levels of a third variable with the hue parameter, which plots different subsets of data in different colors.

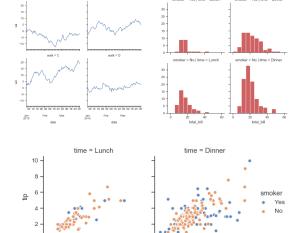
FacetGrid()

FacetGrid.map()

Apply a plotting function to each facet's subset of the data.

FacetGrid.map_dataframe()

Like .map but passes args as strings and inserts data in kwargs.



Pair grids

Subplot grid for plotting pairwise relationships in a dataset.

This class maps each variable in a dataset onto a column and row in a grid of multiple axes. Different axes-level plotting functions can be used to draw bivariate plots in the upper and lower triangles, and the the marginal distribution of each variable can be shown on the diagonal.

It can also represent an additional level of conditionalization with the *hue* parameter, which plots different subsets of data in different colors.

pairplot()

Plot pairwise relationships in a dataset.

PairGrid()

PairGrid.map()

Plot with the same function in every subplot.

PairGrid.map_diag()

Plot with a univariate function on each diagonal subplot.

PairGrid.map_offdiag()

Plot with a bivariate function on the off-diagonal subplots.

PairGrid.map_lower()

Plot with a bivariate function on the lower diagonal subplots.

PairGrid.map_upper()

Plot with a bivariate function on the upper diagonal subplots.

Joint grids

Grid for drawing a bivariate plot with marginal univariate plots.

jointplot() Draw a plot of two variables with bivariate and

univariate graphs.

JointGrid() Grid for drawing a bivariate plot with marginal

univariate plots.

JointGrid.plot() Shortcut to draw the full plot.

JointGrid.plot_joint() Draw a bivariate plot of \boldsymbol{x} and \boldsymbol{y} .

JointGrid.plot_marginals() Draw univariate plots for x and y separately.

