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| PANDAS | MATPLOTLIB | SEABORN | PLOTLY |
| df.plot. ...()  ... → area, bar, barh, box, density, hexbin, hist, kde, line, pie, scatter | plt. ...()  … →box, hist, … | sns. ... (tips['total\_bill'])  … → rugplot, kdeplot, barplot, countplot, boxplot, violinplot, stripplot, swarmplot, lmplot, |  |
| df1['A'].hist(bins=30)  df1['A'].plot(kind='hist', bins=30)  df1['A'].plot.hist(bins=30) | Functional method  x =np.linspace(0,5,11) y=x\*\*2 plt.plot(x,y, 'r') plt.xlabel('X') plt.ylabel('Y') plt.title('y=x\*\*2') plt.legend('y') | sns.histplot(tips['total\_bill'], kde=True, bins=20) *#kde default True* | df.iplot(kind='...', x='A', y='B', mode='markers', size=20)    … →scatter, bar, box, surface, hist, spread, bubble |
|  | plt.subplot(1,2,1) plt.plot(x,y, 'r')  plt.subplot(1,2,2) plt.plot(y,x, 'g') | *# jointplot - allows to show 2 distplots*  sns.jointplot(x='total\_bill',y='tip',data=tips, kind='hex') *#more points - darker hexagon, default kind=’scatter’ also: kde/reg* | df.scatter\_matrix() |
|  | fig=plt.figure()  axes=fig.add\_axes([0.1,0.1,0.8,0.8]) *# left, bottom, width, height*  axes.plot(x,y) axes.set\_xlabel('X') axes.set\_ylabel('Y') axes.set\_title('y = x\*\*2')  axes2=fig.add\_axes([0,0.5,0.4,0.4]) axes2.plot(y,x, 'r') | sns.pairplot(tips, hue='sex', palette='Set2') |  |
|  | fig, axes=plt.subplots(nrows=1, ncols=2)  *# axes are iterable, for a in axes: ...*  axes[0].plot(x,x,'r', label='y=x')   axes[1].plot(x,y,'b', label='y=x\*\*2') axes[1].plot(x,y\*2,'g', label='y=2\*(x\*\*2)')  axes[0].legend(loc=(0.2,0.8)) axes[1].legend(loc='center') *# location codes in documentation*   plt.tight\_layout() | sns.catplot(x='day', y='total\_bill', data=tips, kind='bar') *#factorplot -> catplot*  *# catplot is a general plot and kind is declared inside* |  |
|  |  | sns. ... (tips.corr(), annot=True, cmap='coolwarm')    … → heatmap, clustermap, pairplot |  |
|  |  | g=sns.PairGrid(iris) g.map\_diag(sns.histplot) g.map\_upper(plt.scatter) g.map\_lower(sns.kdeplot) |  |
|  |  | g=sns.FacetGrid(data=tips, col='time', row='smoker') g.map(..., 'total\_bill')    …→ sns.histplot, plt.scatter |  |
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