

Module-03, Python for Data Analysis

Data Visualization (matplotlib-Potting)

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3-Months Course
at
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Bar Plots

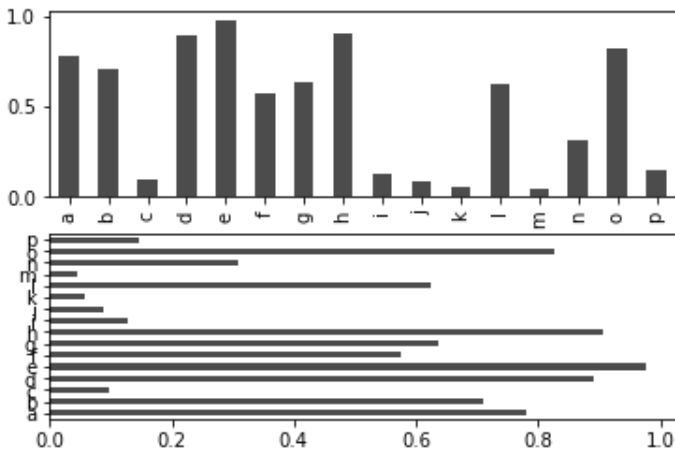
The `plot.bar()` and `plot.barh()` make vertical and horizontal bar plots, respectively. In this case, the Series or DataFrame index will be used as the x (bar) or y (barh) ticks

Genus	A	B	C	D
one	0.177816	0.380926	0.948169	0.551040
two	0.058018	0.877469	0.989350	0.052498
three	0.256529	0.027343	0.532624	0.441405
four	0.318070	0.332826	0.940490	0.887636
five	0.070916	0.582339	0.709841	0.817573
six	0.116286	0.922073	0.496917	0.010455



Bar Plot

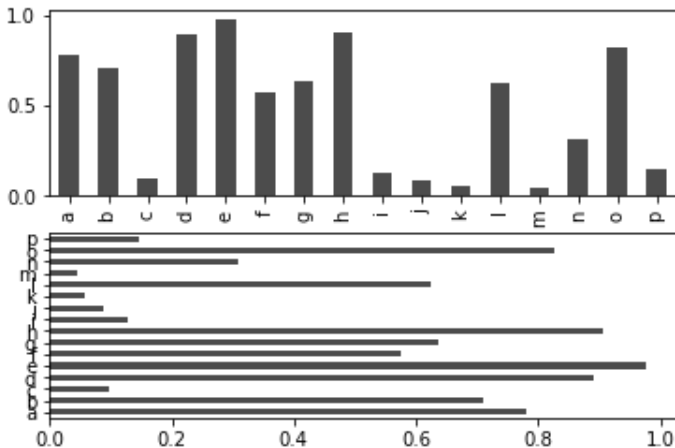
- Bar Plot,



- Vertical and horizontal bar plots.

Bar Plot

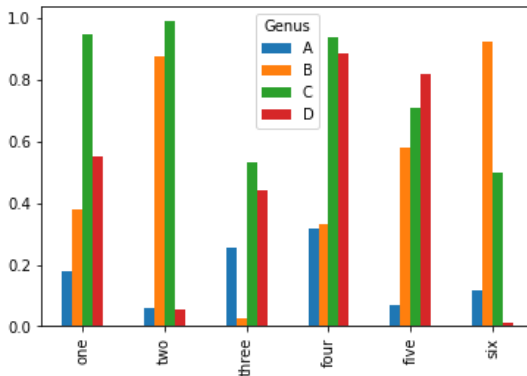
- Bar Plot,



- Vertical and horizontal bar plots.

Interactive Bar Plot

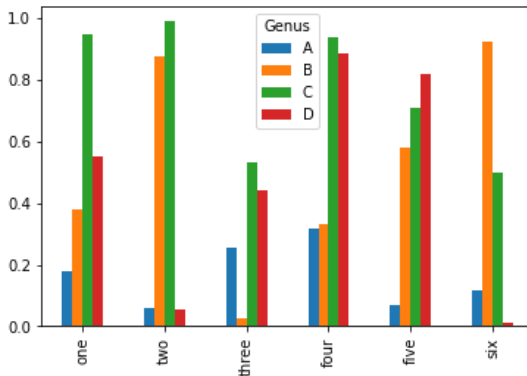
- Bar Plot,



- Bar plots group the values in each row together in a group in bars, side by side, for each value.
- Note that the name “Genus” on the DataFrame’s columns is used to title the legend

Interactive Bar Plot

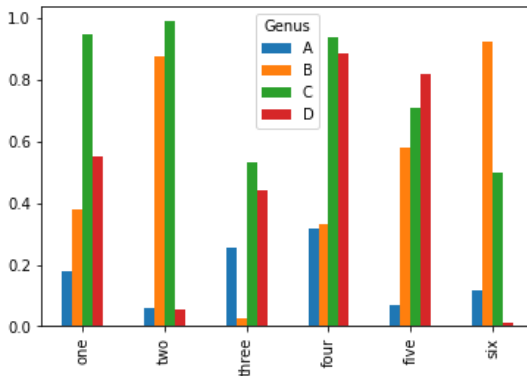
- Bar Plot,



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- Note that the name "Genus" on the DataFrame's columns is used to title the legend

Interactive Bar Plot

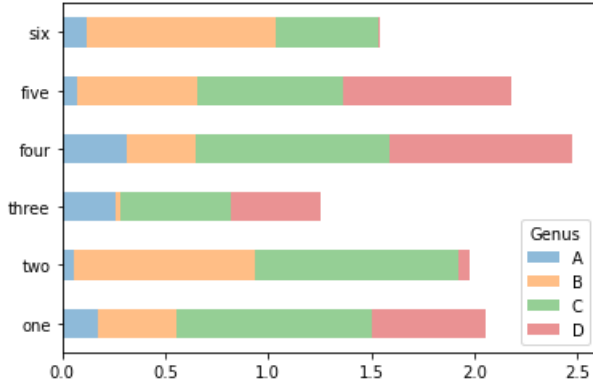
- Bar Plot,



- Bar plots group the values in each row together in a group in bars, side by side, for each value.
- Note that the name “Genus” on the DataFrame’s columns is used to title the legend

Stacked bar plots

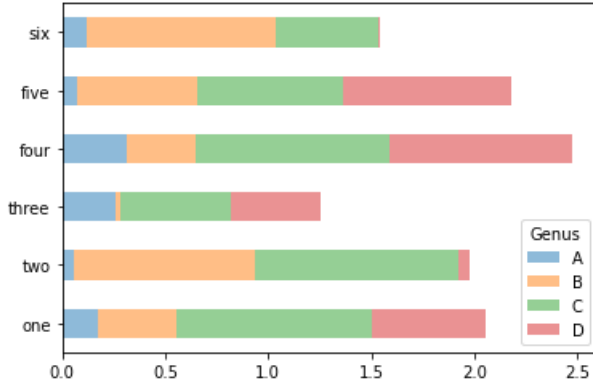
- Stacked bar plots ,



- We create stacked bar plots from a DataFrame by passing `stacked=True`, resulting in the value in each row being stacked together.

Stacked bar plots

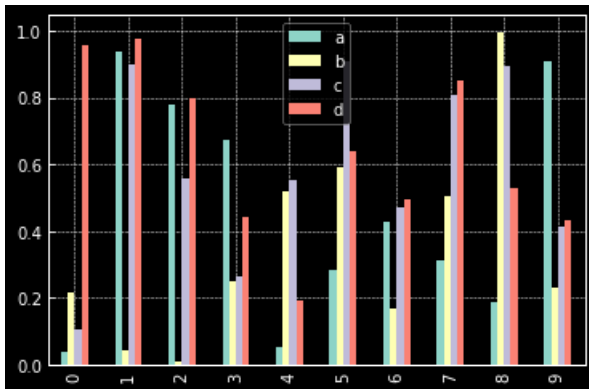
- Stacked bar plots ,



- We create stacked bar plots from a DataFrame by passing `stacked=True`, resulting in the value in each row being stacked together.

Style for bar

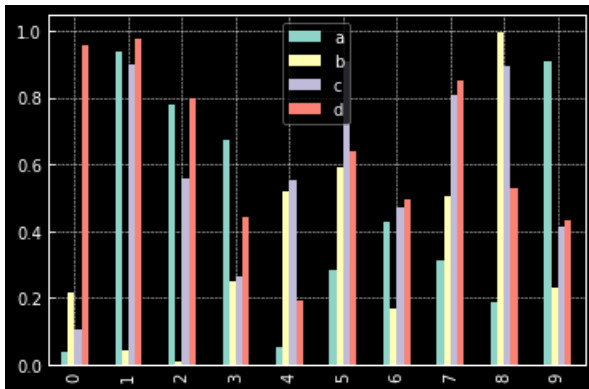
- Style of Bar,



- We have to see some style and background color, for more informative in details.

Style for bar

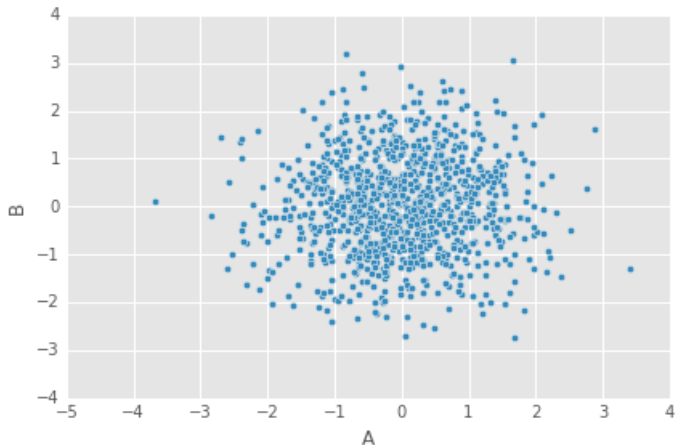
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Scatter Plots

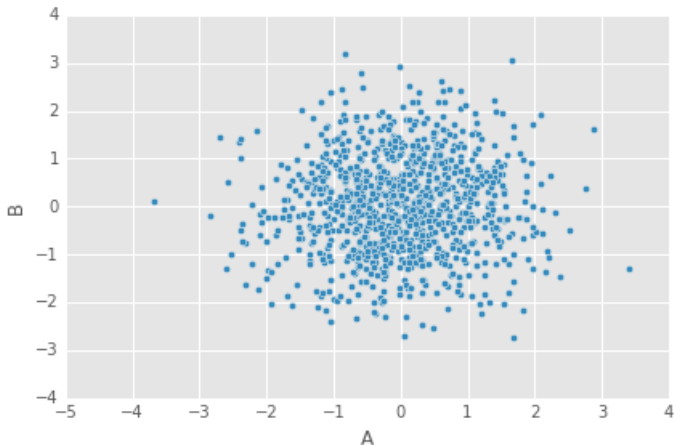
- Scatter Plot



- This is Scatter plot of data points between two columns of df3.

Scatter Plots

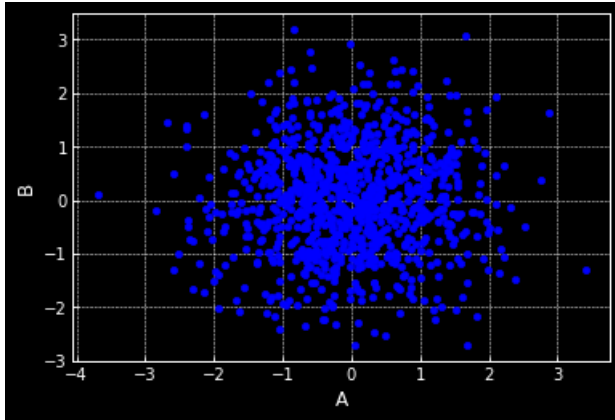
- Scatter Plot



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Style Scatter Plots

- Style Scatter Plot

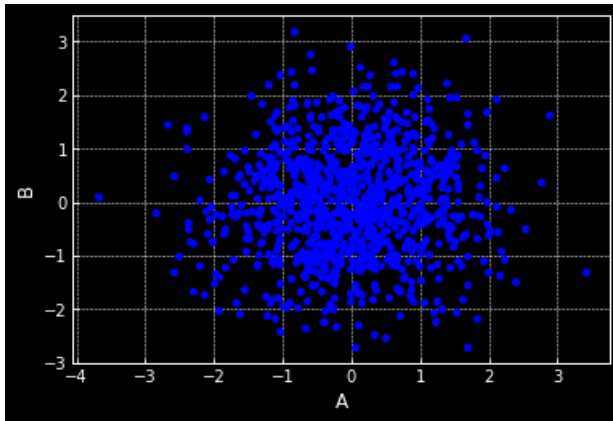


- This is Scatter plot same is above but change style and background color.



Style Scatter Plots

- Style Scatter Plot

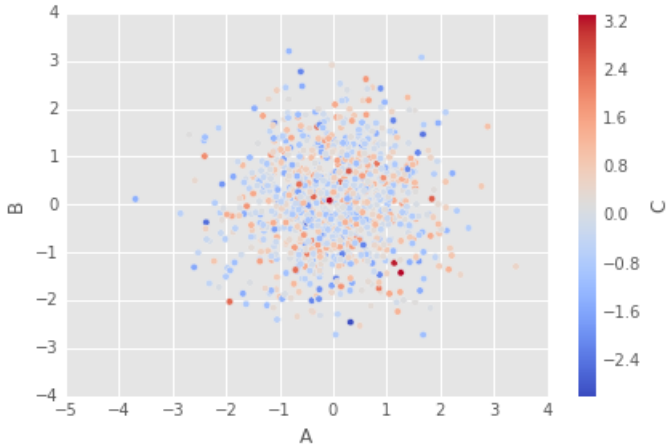


- This is Scatter plot same is above but change style and background color.



line with Scatter Plots

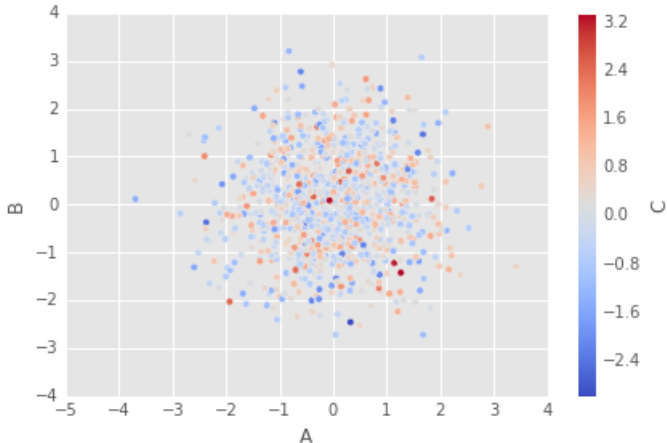
- Line with Scatter Plot



- We can use c to color based off another column value Use cmap to indicate colormap to use. For all the colormaps,

line with Scatter Plots

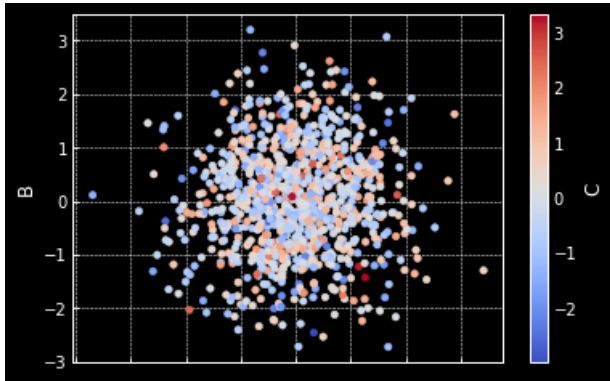
- Line with Scatter Plot



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line Style Scatter Plots

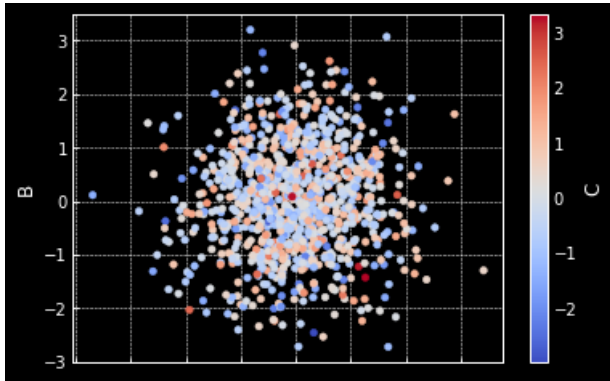
- Line Style Scatter Plot



- More clear.

line Style Scatter Plots

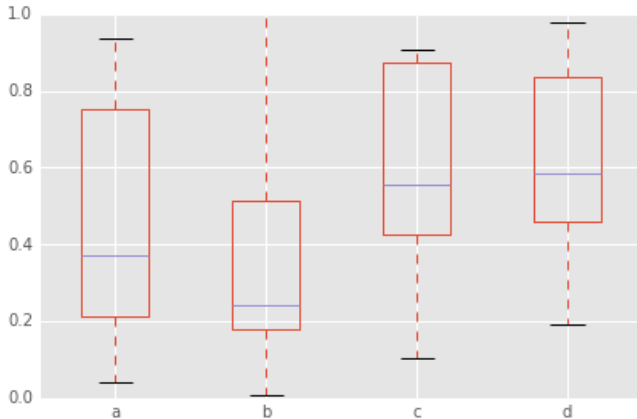
- Line Style Scatter Plot



- More clear.

Box Plots

- Box Plots

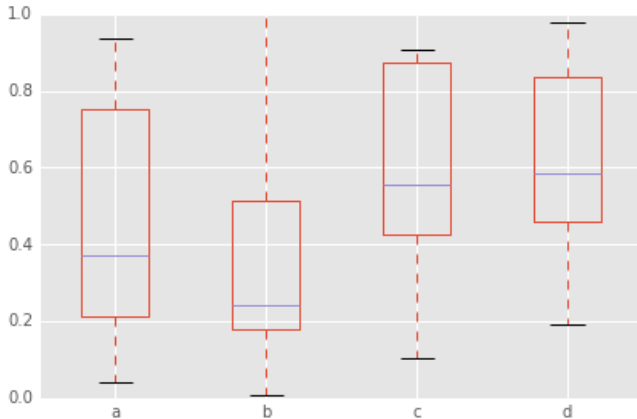


- We have see each columns data distributions.



Box Plots

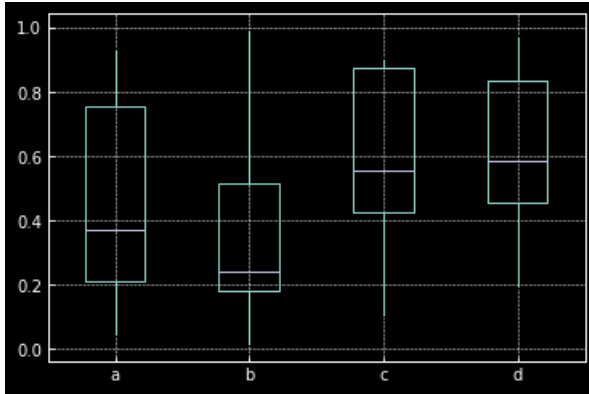
- Box Plots



- We have see each columns data distributions.

Style Box Plots

- Style Box Plots

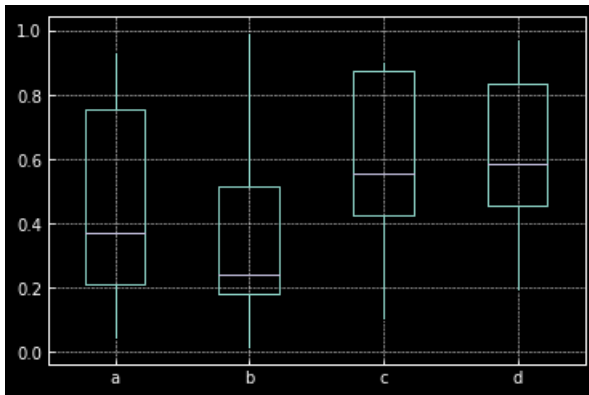


- We have see each columns data distributions with more clear with background color.



Style Box Plots

- Style Box Plots



- We have see each columns data distributions with more clear with background color.

Great Job
Thank yo

