## Comparing Frequency Distributions: Takeaways

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## **Syntax**

• Generating a grouped bar plot:

• Generating only the shape of the histogram for two Series objects:

```
Series_1.plot.hist(histtype = 'step')
Series_2.plot.hist(histtype = 'step')
```

• Generating kernel density plots for two **Series** objects:

```
Series_1.plot.kde()
Series_2.plot.kde()
```

• Generating strip plots:

• Generating multiple box plots:

## **Concepts**

- To compare visually frequency distributions for nominal and ordinal variables we can use **grouped bar plots**.
- To compare visually frequency distributions for variables measured on an interval or ratio scale, we can use:
  - Step-type histograms.
  - Kernel density plots.
  - Strip plots.
  - Box plots.
- A value that is much lower or much larger than the rest of the values in a distribution is called an **outlier**. A value is an outlier if:
  - It's larger than the upper quartile by 1.5 times the interquartile range.
  - It's lower than the lower quartile by 1.5 times the interquartile range.

## Resources

- A seaborn tutorial on grouped bar plots, strip plots, box plots, and more.
- A seaborn tutorial on kernel density plots, histograms, and more.



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