>>> Introduction to data visualization with Python
>>> Women in Python

Name: Saulo Meirelles
Date: May 15, 2019

>>> Learning objetives

1. Understand the importance of data visualization.

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2. Create figures (graphs) in Python.

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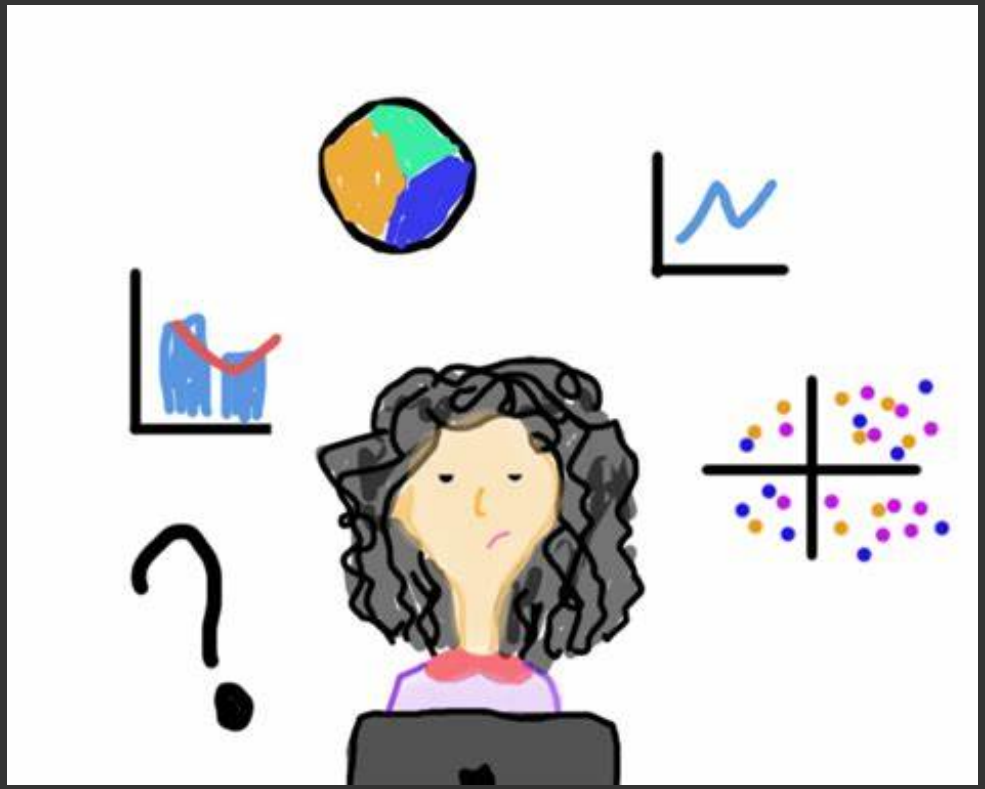
Data visualization is the graphical representation of information and data.



>>> What is a data?

Data is a set of values of qualitative or quantitative information [...]. Data is measured, collected and reported, and analyzed. It can be visualized using graphs or images (Wikipedia).

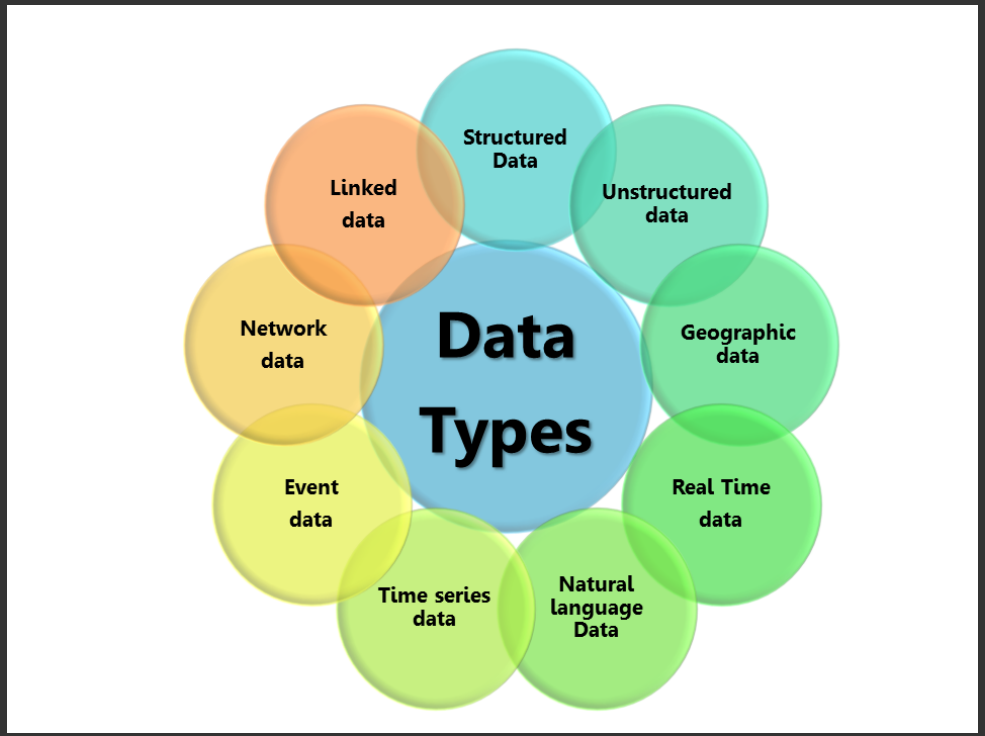
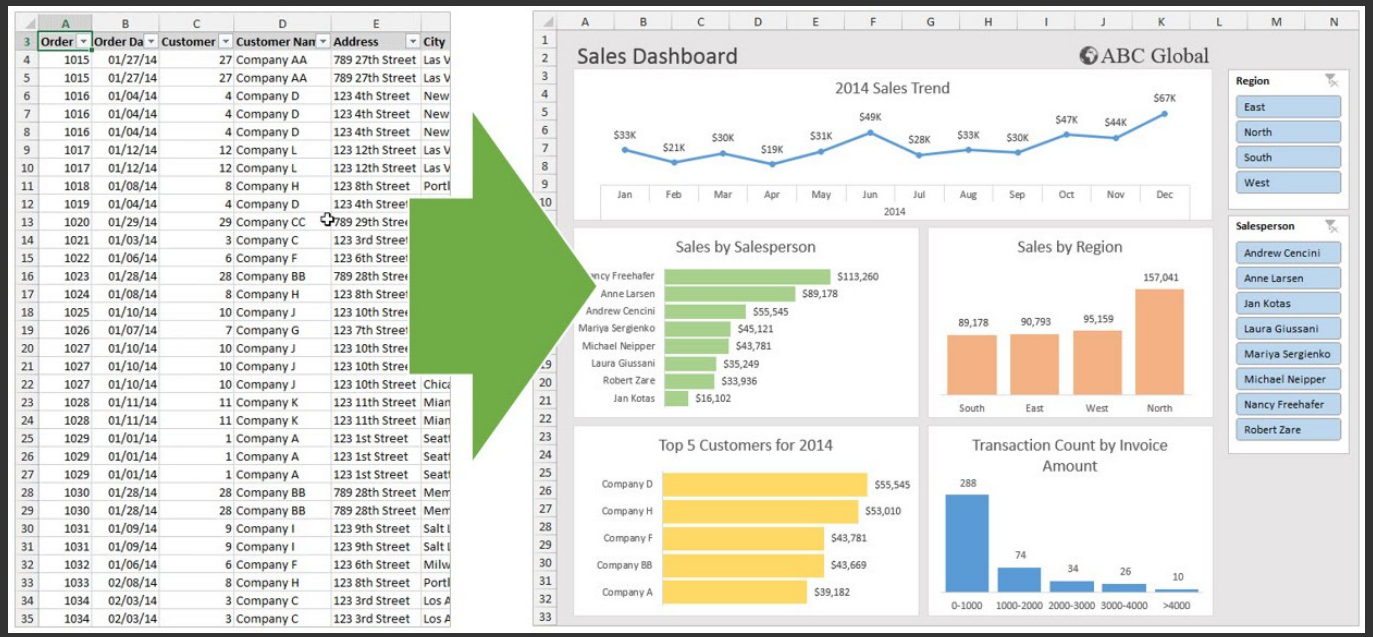


Figure: Types of data

>>> The importance of data visualization



Grid

American Stocks

Name	Jan	Feb	Mar
INDU:IND	17,834.17	18,004.03	21,134.17
SPX:IND	1,932.60	2,012.60	2,132.60
CCMP:IND	4,958.95	5,058.95	5,158.95
NYA:IND	9,609.85	10,209.85	10,609.85
SPTSX:IND	13,468.55	14,168.55	14,468.55

Chart

American Stocks

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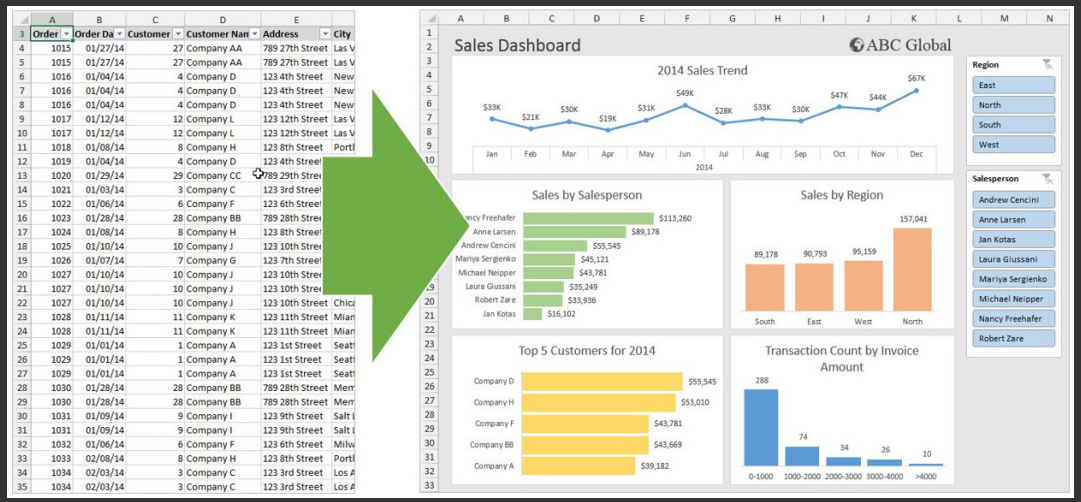

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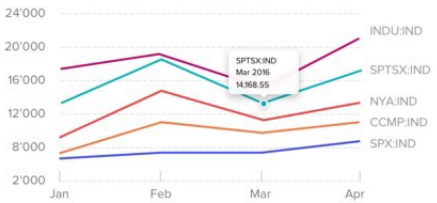

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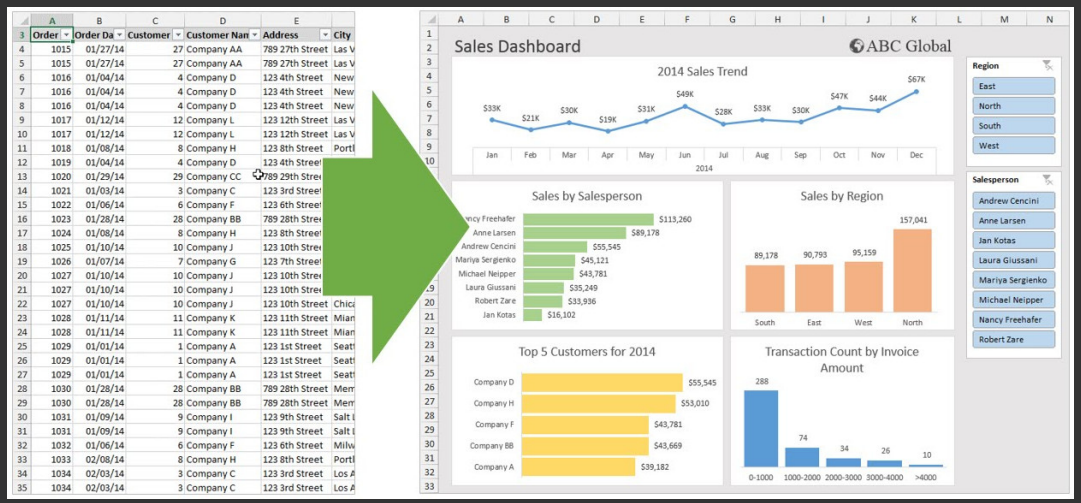

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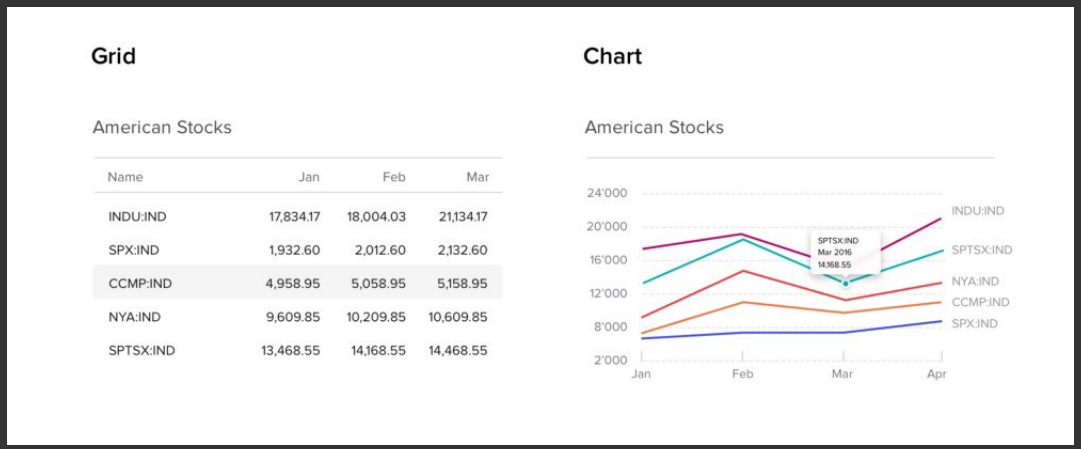

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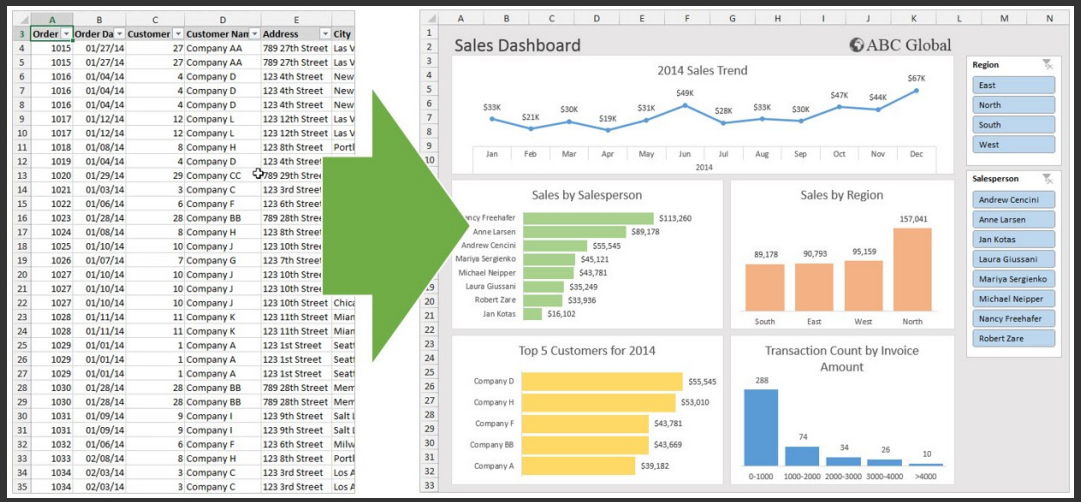

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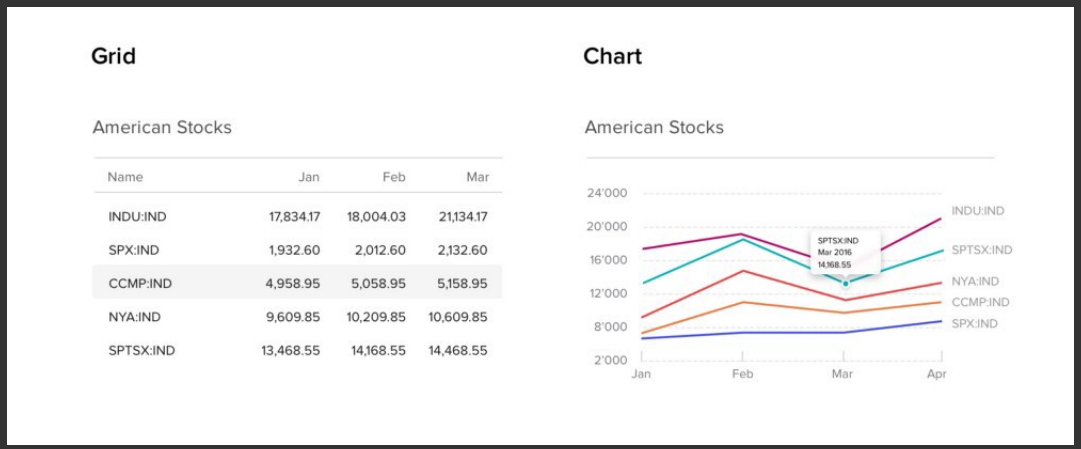
* Find trends and outliers.



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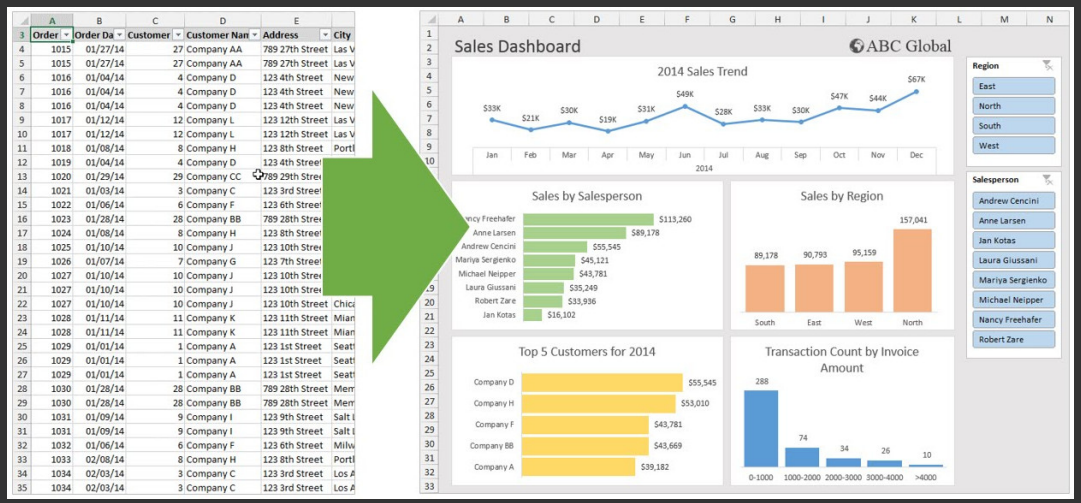

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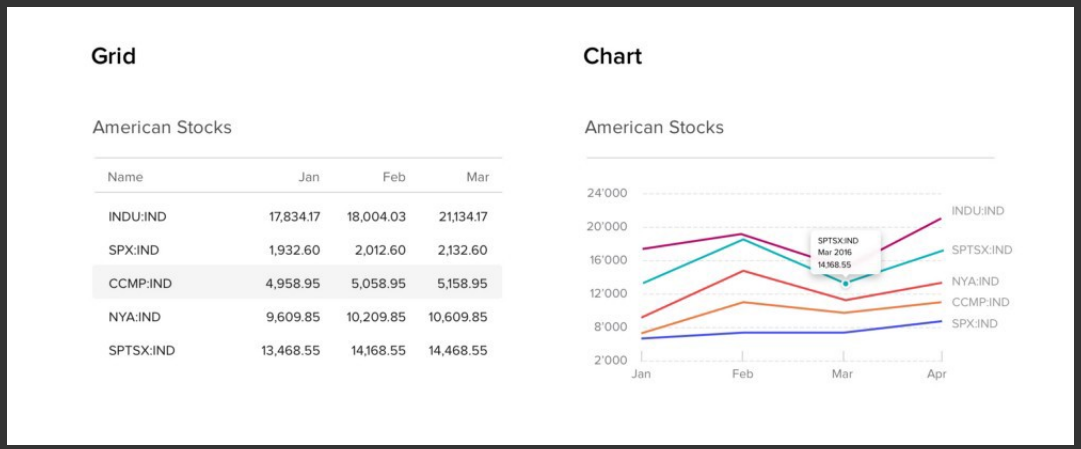
* Find trends and outliers.
* Identify relationships and patterns.



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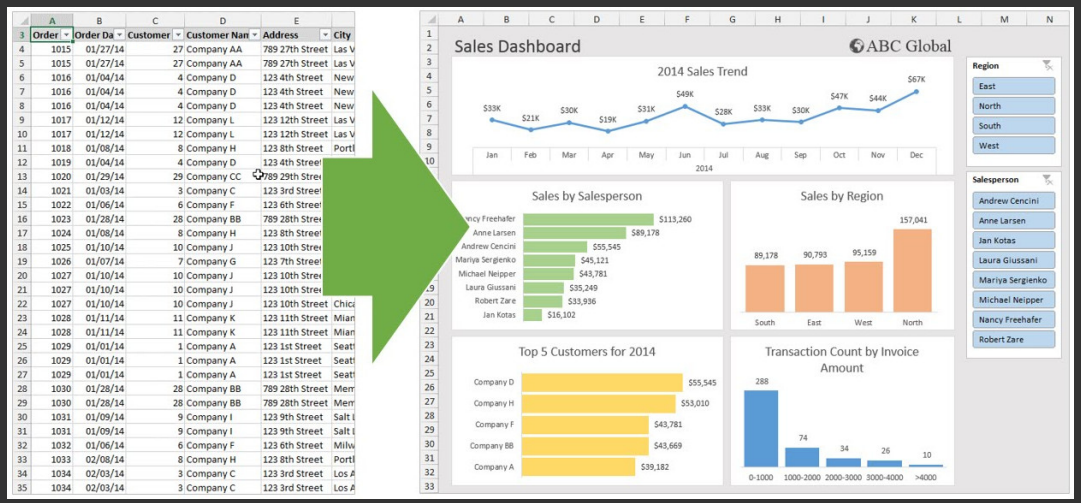

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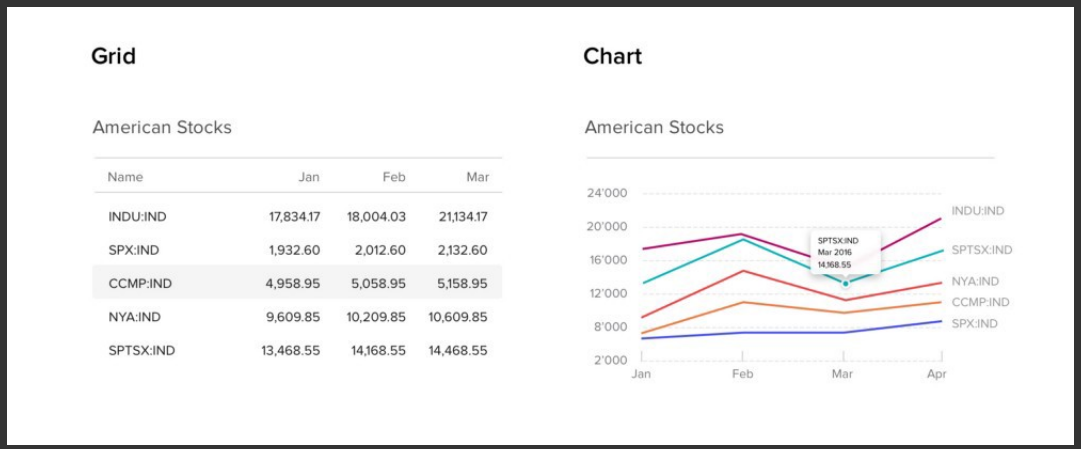
* Find trends and outliers.
* Identify relationships and patterns.
* Communicate the story to others.



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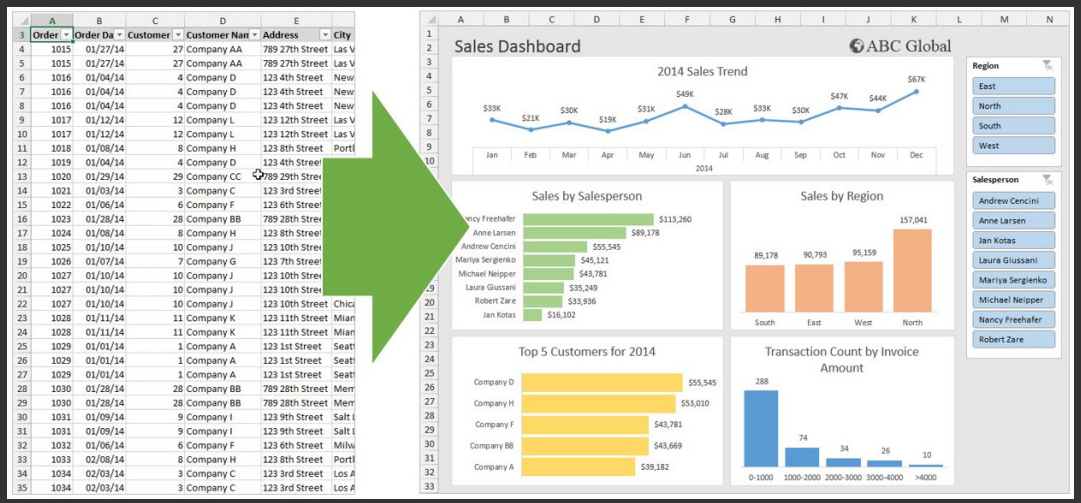

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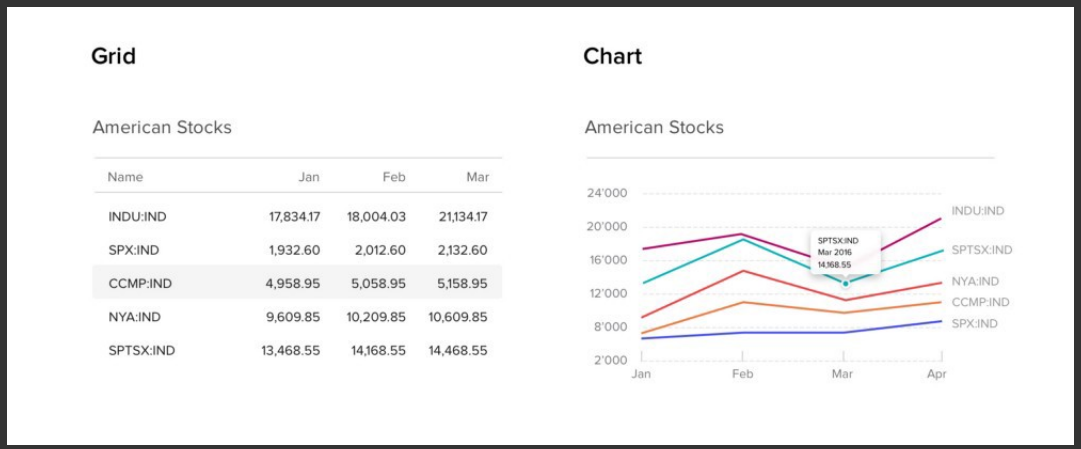
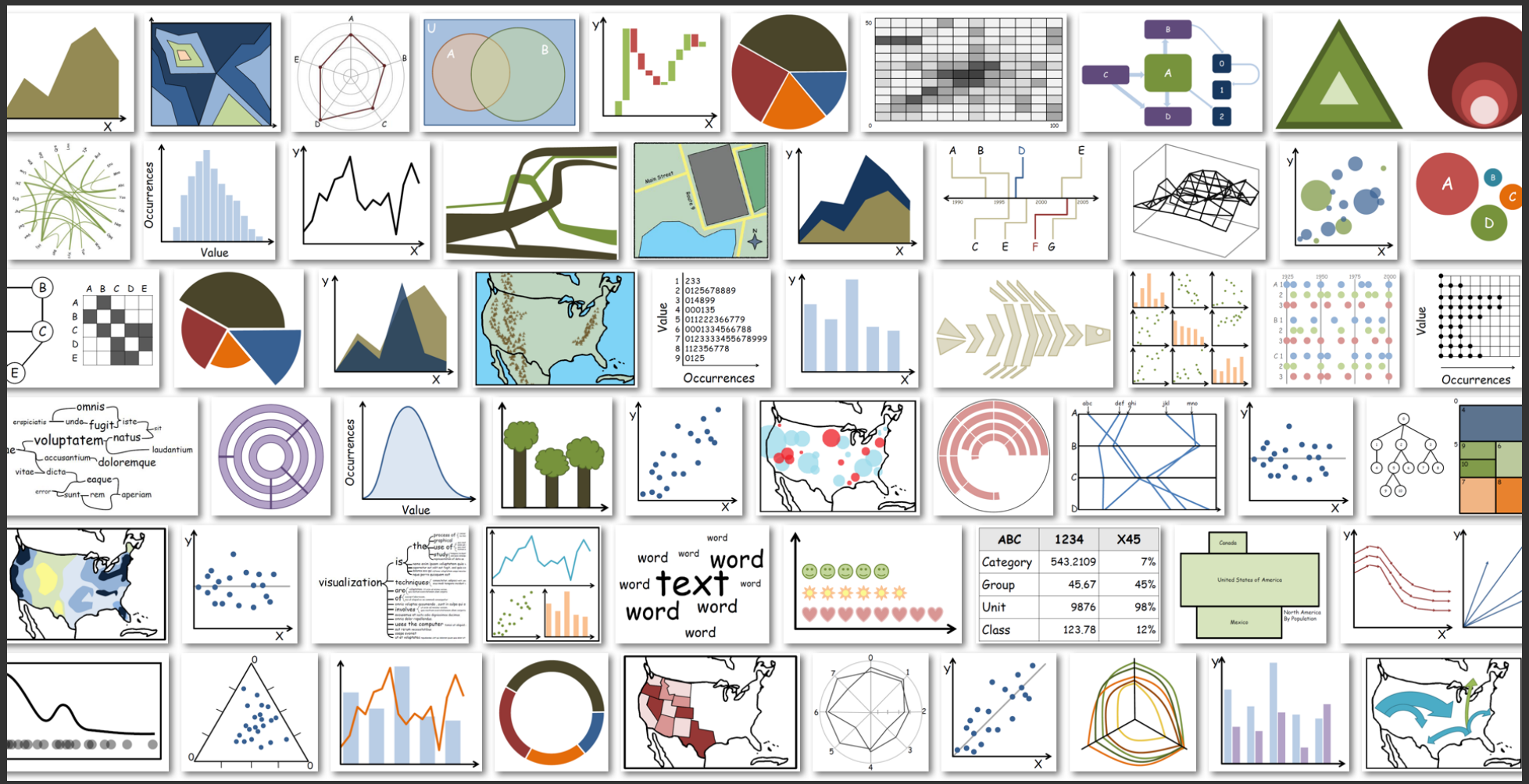
* Find trends and outliers.
* Identify relationships and patterns.
* Communicate the story to others.
* Handle big data.



>>> Types of charts



>>> Hands on!

Packages to install

```
conda install -c conda-forge matplotlib
conda install -c plotly plotly
conda install xlrd
```

Code and files available here.