Pandas: DataFrame Pivoting

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"Wide" and "Long" DataFrame

Wide Format

constituency_name	con	lab	valid_votes
Aberavon	6518	17008	31598
Aberconwy	14687	12653	31865
Aberdeen North	7535	4939	37413
Aberdeen South	16398	3834	45638
Airdrie and Shotts	7011	12728	39772

Long Format

constituency_name	valid_votes	party	vote
Aberavon	31598	con	6518
Aberavon	31598	lab	17008
Aberconwy	31865	con	14687
Aberconwy	31865	lab	12653
Aberdeen North	37413	con	7535
Aberdeen North	37413	lab	4939
Aberdeen South	45638	con	16398
Aberdeen South	45638	lab	3834

"Wide" and "Long" DataFrame

- "Wide": There are several variables of the same masure for different units
  - e.g. Unemployment data. Multiple columns for unemployment rates in different months
- You many want to convert between these formats
  - In pandas, you can achieve that with
    - `melt()`: "Wide" to "Long"
    - `pivot()`: "Long" to "Wide"

Demo