1 Data Wrangling: Clean, Transform, Merge, Reshape

1.1 Combining and Merging Data Sets

Database-style DataFrame Merges
Merging on Index
Concatenating Along an Axis
Combining Data with Overlap

1.2 Reshaping and Pivoting

Reshaping with Hierarchical Indexing
Pivoting "long" to "wide" Format

1.3 Data Transformation

Removing Duplicates
Transforming Data Using a Function or Mapping
Replacing Values
Renaming Axis Indexes
Discretization and Binning
Detecting and Filtering Outliers
Permutation and Random Sampling
Computing Indicator/Dummy Variables

1.4 String Manipulation

String Object Methods
Regular expressions
Vectorized string functions in pandas

1.5 Example: USDA Food Database