

1 Data Aggregation and Group Operations

1.1 GroupBy Mechanics

Iterating Over Groups Selecting a Column or Subset of Columns

Grouping with Dicts and Series Grouping with Functions

Grouping by Index Levels

1.2 Data Aggregation

Column-wise and Multiple Function Application

Returning Aggregated Data in “unindexed” Form

1.3 Group-wise Operations and Transformations

Apply: General split-apply-combine Quantile and Bucket Analysis

Example: Filling Missing Values with Group-specific Values Example: Random Sampling and Permutation

Example: Group Weighted Average and Correlation

Example: Group-wise Linear Regression

1.4 Pivot Tables and Cross-Tabulation

Cross-Tabulations: Crosstab

1.5 Example: Federal Election Commission Database

Donation Statistics by Occupation and Employer

Bucketing Donation Amounts

Donation Statistics by State