

Unit No	Unit Name and Details	No of Lectures
1	The Seven Stages of Visualizing Data Why Data Display Requires Planning, An Example, Iteration and Combination , Principles, Getting Started with Processing, Sketching with Processing, Exporting and Distributing Your Work, Examples and Reference, Functions, Sketching and Scripting	7
2	Time Series Milk, Tea, and Coffee (Acquire and Parse),Cleaning the Table (Filter and Mine), A Simple Plot (Represent and Refine) Labeling the Current Data Set (Refine and Interact), Drawing Axis Labels (Refine), Choosing a Proper Representation (Represent and Refine), Using Rollovers to Highlight Points (Interact) Ways to Connect Points (Refine), Text Labels As Tabbed Panes (Interact), Interpolation Between Data Sets (Interact) ,End of the Series	6
3	Connections and Correlations Problem Statement Preprocessing Using the Preprocessed Data (Acquire, Parse, Filter, Mine), Displaying the Results (Represent) Returning to the Question (Refine),Sophisticated Sorting: Using Salary As a Tiebreaker (Mine), Moving to Multiple Days (Interact), Smoothing Out the Interaction (Refine),Deployment Considerations (Acquire, Parse, Filter)	6
4	Scatterplot Maps Preprocessing Loading the Data (Acquire and Parse) .Drawing a Scatterplot of Zip Codes (Mine and Represent) ,Highlighting Points While Typing (Refine and Interact) ,Show the Currently Selected Point (Refine), Progressively Dimming and Brightening Points (Refine) ,Zooming In (Interact) , Changing How Points Are Drawn When Zooming (Refine) ,Deployment Issues (Acquire and Refine)	6
5	Trees, Hierarchies, and Recursion Using Recursion to Build a Directory Tree Using a Queue to Load Asynchronously (Interact) ,An Introduction to Treemaps, Which Files Are Using the Most Space?. Viewing Folder Contents (Interact), Improving the Treemap Display (Refine), Flying Through Files (Interact) ,Next Steps	6
6	Acquiring Data Where to Find Data ,Tools for Acquiring Data from the Internet, Locating Files for Use with Processing ,Loading Text Data, Dealing with Files and Folders ,Listing Files in a Folder ,Asynchronous Image Downloads ,Using open Stream () As a Bridge to Java ,Dealing with Byte Arrays ,Advanced Web Techniques, Using a Database , Dealing with a Large Number of Files	5