数据可视化

Week 10

Bind data

虞思逸

1. Data preparation

Array
- Statistics
- Search
- Transformations

Chords
- Chord

Collections
- Objects
- Maps
- Sets
- Nests

Hierarchies
- Hierarchy

Shapes
- Pies
- Stacks

Time intervals
- Time intervals

2. Layout calculation

Array
- Histograms

Chords
- Chord (ribbon)

Contours
- Contours

Forces
- Force

Geographies
- Paths
- Projections

Hierarchies
- Cluster
- Tree
- Treemap
- Partition
- Pack

Scales
- Continuous
- Quantize
- Quantile
- Threshold
- Ordinal

Shapes
- Arcs
- Lines
- Areas

3. DOM manipulation

Selections
- Selecting
- Modifying
- Joining data

A. Finishing touches

Axes
- Axis

Animation
- Interpolators
- Easings
- Timers
- Transitions

Color schemes
- Categorical
- Diverging
- Sequential
- Cyclical

Format
- Number format
- Time format

Scales (for color)
- Sequential
- Diverging

Shapes
- Curves
- Links
- Symbols

B. Interactions

Brushes
- Brush

Dispatches
- Dispatch

Drag
- Drag

Quadtree
- Quadtree

Selections
- Events

Voronoi
- Voronoi

Zoom
- Zoom
- Pan

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选择

- d3.select(selector)
- d3.selectAll(selector)
- selection.select(selector)
- selection.selectAll(selector)

数据绑定

- selection.data(data)
- selection.datum(value)
- .enter()
- .text(function(d) {return d;})

自定义函数

- 命名函数

```
var getdata =
function(input_value) {
//完成一些计算
return output_value;
}
```

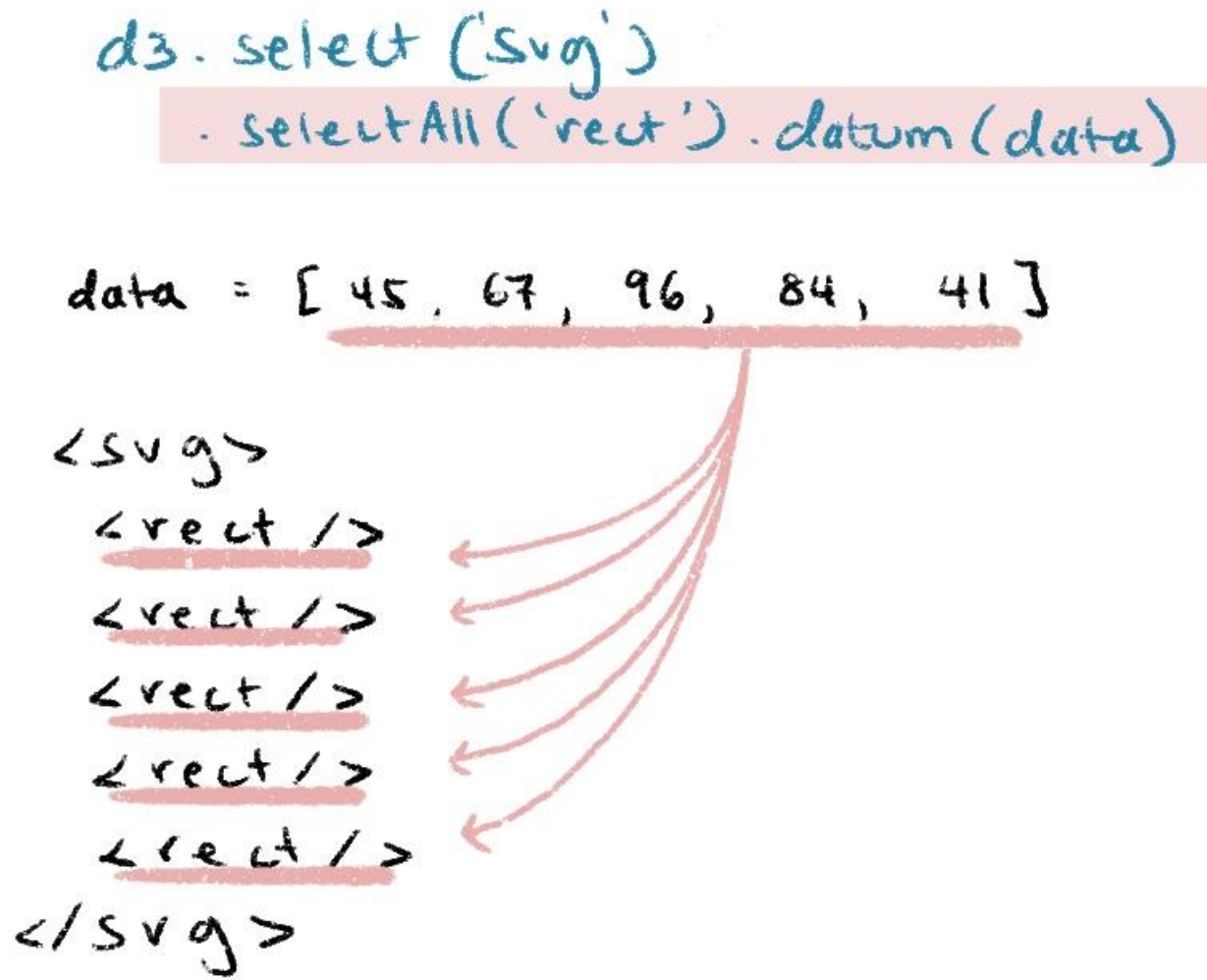
- 匿名函数

```
function(d) {
    return d;
}
```

- 箭头函数
- (param1, param2, …)
  =>{ return expression; }
- (d) => {d}

数据绑定

- **selection.datum(value)**
- **selection.data(data)**



数据绑定

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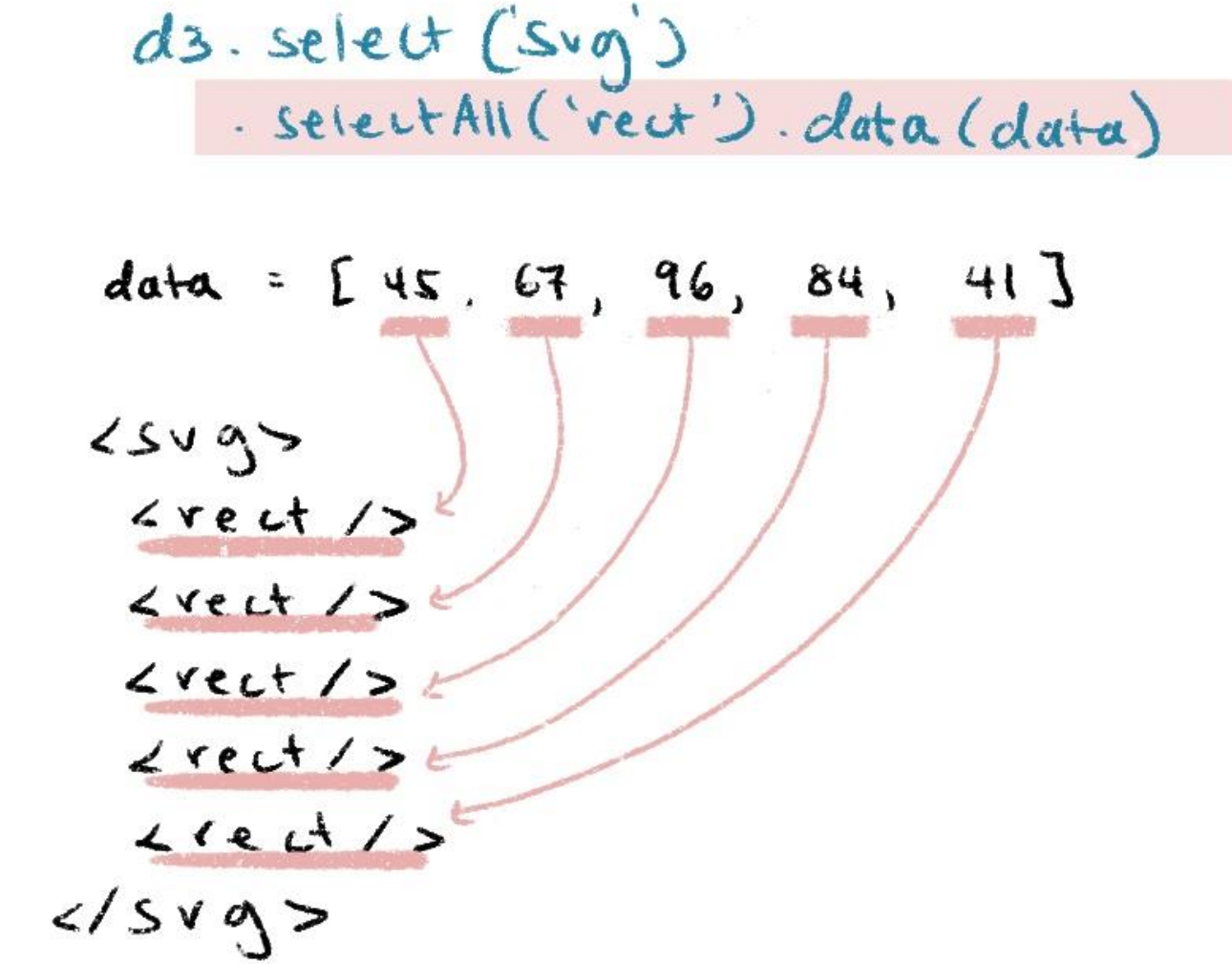
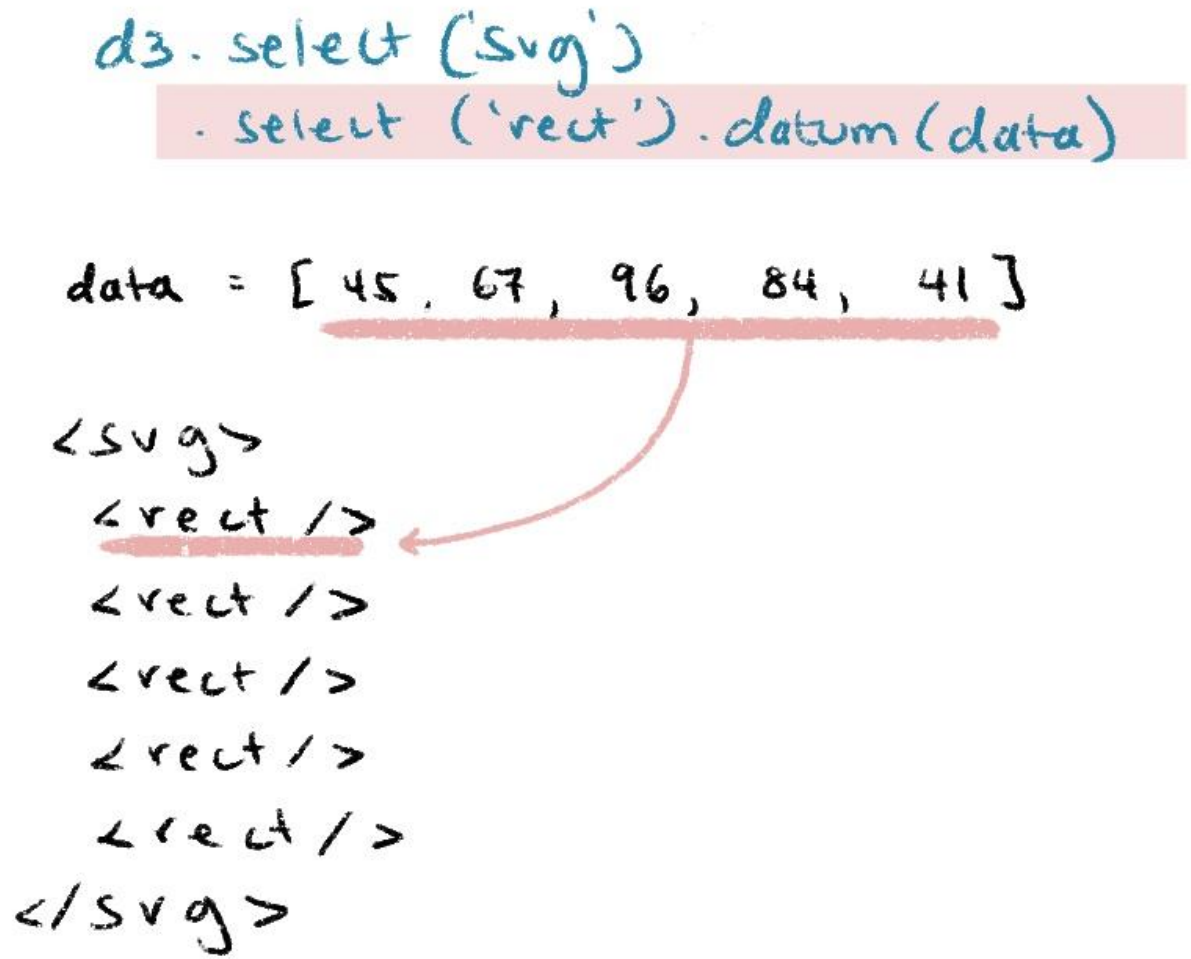
- selection.data(data)



数据绑定

- **selection.datum(value)**
- **selection.data(data)**



修改属性

- **selection.attr()**
- **selection.style()**

https://developer.mozilla.org/en-US/docs/Web/SVG/Attribute/Presentation

练习：五片花瓣并加以着色

- 课后练习：尝试读入movies数据，并基于电影的类型（最主要类型）将花瓣涂成不同的颜色（仅要求前五个电影）。
- 不要求完成，但请尽量完成（效果如右图）。

- **必须完成的↓**

①填充好Week10forSTU中ExampleA 与 B的空白区域，讲代码与网页截图提交至超星平台。

②将Example C的完成思路回答在超星平台上（包括什么步骤，每一步需要做什么，请尽量详细）。

- **选择完成的↓**

③实现该思路，并将代码与截图提交至超星平台。

https://shirleywu.studio/filmflowers/