



Convert into json.

Use this:

courses.engr.illinois.edu/cs105/data_convert

creates json version of the input csv data.

Important Note: **Never do coding in WORD! Always use a good editor.**

We want to format it as:

rows for schools

columns for years

viz.js: does everything for visualization

- append is function to add something to the canvas.
- attr: where do we want the text to be
- d is the current object. It is a for loop and it iterates over the schools array. And at any point it is "d".
- .text is what we want to print here
- But since all values getting returned at the same place. we need to specify where the text should be.

`svg.selectAll()`

`.data(schools)`

`.enter()`

`.append("text")`

`.attr("x",function (d) {return x(d);})`

`.attr("y", function(d) {return y(d);})`

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

`.style("text-anchor","end");`

```
svg.selectAll()  
  .data(years)  
  .enter()  
  .append("text")  
  .attr("x",function (d) {return x(d) + (x.rangeBand()/2;})  
  .attr("y", function(d) {return 0;})  
  .text(function (d) {return d;})  
  .attr("transform", "rotate(-90)");
```

Now we want to know who we played with.

And then we want it to tell us which games did win. By default the color is black for box. So we use "style".

```
svg.selectAll()  
  .data(results)  
  .enter()  
  .append("rect")  
  .attr("x",function (d) {return x(d.year);})  
  .attr("y",function (d) {return y(d.opponent);})  
  .attr("width",function(d) {return 10;})  
  .attr("height",function(d) {return 10;})  
  .style("fill", function(d) {  
    if (d.result == "W") {  
      return "Green";  
    } else {  
      return "Red";  
    }  
  });
```