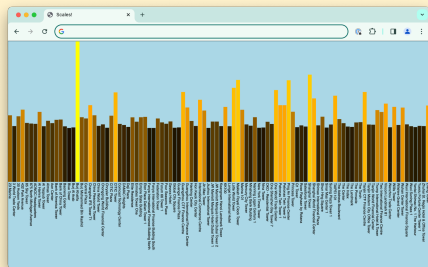


Lab 4: Scales in D3

This sheet is for synthesizing your learning into concise descriptions for your future self and classmates. It is recommended to first make sense of the new learnings in the lecture and only after you feel you have grasped them, use this sheet to summarize the most important points.

Using the two images, illustrate **what scales are** used for in D3:



Annotate the next lines of code. Clarify the difference between **domain** and **range**. Be as detailed as possible:

```
let w = 1200;
let h = 800;

let yScale = d3.scaleLinear().domain( [0, 830] ).range( [0, h/2] );

function getHeight(d, i){
  return yScale(d.height);
}
```

Time scale: from raw data to scaled graph - connect and annotate:

```
let timeParse = d3.timeParse("%Y");
```

```
{
  "Book": "A Tale of Two Cities",
  "Author(s)": "Charles Dickens",
  "Genre": "Historical fiction",
  "Original_language": "English",
  "First_published": "1859",
  "Approximate_sales": 200000000
}
```

```
// JavaScript's Array.map() method
```

```
let timeScale = d3.scaleTime().domain([earliestYear, latestyear]).range([50, w-300]);
```

```
function getGroupPosition(d, i, data){
  let x = timeScale(d.First_published);
```