```
1 <!DOCTYPE html>
 2 <!-- cse6242 -->
 4 <!-- run: http-server & -->
 6 <head>
 7
    <title>Running Total of TMDb Movies by Year</title>
 8
     <style>
 9
        <!-- define CSS rules -->
10
     </style>
11 </head>
12
13 <body>
14
15
     <script src="lib/d3/d3.min.js"></script>
16
     <script src="lib/d3-dsv/d3-dsv.min.js"></script>
17
      <script src="lib/d3-fetch/d3-fetch.min.js"></script>
18
19
20
     <script>
21
       // define the dimensions and margins for the graph
       var w = 960;
22
23
       var h = 500;
       var barPadding = 5;
24
25
       var padding = 50;
26
27
       // define function to parse time in years format
28
       var formatTime = d3.timeParse("%Y")
29
30
       // create scales x & y for X and Y axis and set their ranges
31
       var x = d3.scaleTime().range([padding, w - padding]);
       var y = d3.scaleLinear().range([h-padding, padding]);
32
33
34
35
       // append svg element to the body of the page
       // set dimensions and position of the svg element
36
       var svg = d3.select("body").append("svg").attr("width",w).attr("height",h);
37
38
39
40
       // Get the data
       var pathToCsv = "q3.csv";
41
                                        // path to csv
42
43
       d3.dsv(",", pathToCsv, function (d) {
44
         return {
45
            // format data attributes if required
46
            year: d.year,
47
            running_total: d.running_total
48
49
        }).then(function (data) {
```

```
50
          console.log(data); // you should see the data in your browser's developer
            tools console
51
52
          /* Create bar plot using data from csv */
53
          var min_year = data[0].year;
54
          //console.log(min year)
55
          var max_year = data[data.length - 1].year;
          //console.log(max_year)
56
57
          var max_run = data[data.length - 1].running_total;
58
59
          // set the domains of X and Y scales based on data
60
          x.domain([new Date(min_year, 0, 1), new Date(max_year, 0, 1)]);
61
          y.domain([0, max_run]);
62
63
          // Add bars to svg - create new elements based on your data
64
          svg.selectAll("rect")
65
            .data(data)
66
            .enter()
            .append("rect")
67
            .attr("x", function(d,i){
68
69
                //console.log(d.year);
70
                //console.log(x(new Date(d.year)));
71
                return x(new Date(d.year));
72
            })
            .attr("y", function(d, i){
73
74
                /*if (i < 5 || i > 122){
75
                    console.log(i)
76
                    console.log(h - y(d.running_total));
77
78
                return y(d.running_total);
79
            })
            .attr("width", w / data.length - barPadding)
80
81
            .attr("height", function(d,i){
                /*if (i < 5 || i > 122){
82
83
                    console.log(i)
                    console.log(y(d.running total) - padding)
84
                }*/
85
86
                return h - padding - y(d.running_total);
            })
87
88
            .attr("fill", "blue");
89
90
91
          // Add the X Axis
92
          var xAxis = d3.axisBottom(x).ticks(13);
93
          svg.append("g")
94
                .attr("class", "x_axis")
                .attr("id", "x_axis")
95
                .attr("transform", "translate(0," + (h - padding) + ")")
96
97
                .call(xAxis);
```

```
98
 99
           // Add the text label for X Axis
100
           svg.append("text")
                 .attr("class", "x_axis_label")
101
102
                 .attr("text-anchor", "end")
                 .attr("x", w / 2)
103
                 .attr("y", h - 6)
104
                 .text("Year")
105
106
                 .attr("id", "x_axis_label");
107
108
           // Add the Y Axis
           yAxis = d3.axisLeft(y).ticks(9);
109
           svg.append("g")
110
                 .attr("class", "y_axis")
111
112
                 .attr("id", "y_axis")
                 .attr("transform", "translate(" + padding + ",0)")
113
114
                 .call(yAxis);
115
           // Add the text label for Y axis
116
           svg.append("text")
117
                 .attr("class", "y_axis_label")
118
                 .attr("text-anchor", "end")
119
120
                 .attr("y", 6)
121
                 .attr("x", -200)
                 .attr("transform", "rotate(-90)")
122
123
                 .text("Running Total")
124
                 .attr("id", "y_axis_label");
125
126
           svg.append("text")
                 .attr("x", w / 2)
127
128
                 .attr("y", padding / 3 * 2)
                 .attr("text-anchor", "middle")
129
                 .style("font-size", "30px")
130
                 .text("Running Total of TMDb Movies by Year")
131
                 .attr("id", "title");
132
133
           svg.append("text")
134
135
                 .attr("x", w - padding * 1.5)
                 .attr("y", h - 4)
136
                 .attr("text-anchor", "middle")
137
                 .style("font-size", "10px")
138
                 .text("astroup6")
139
                 .attr("id", "credit");
140
141
142
143
         }).catch(function (error) {
144
           console.log(error);
145
         });
146
```

```
147
148 </script>
149
150 </body>
```