<!DOCTYPE html>

<head>

<script src="https://d3js.org/d3.v4.min.js"></script>

</head>

<body>

<script type="text/javascript">

var w = 800;

var h = 200;

svg = d3.select('body')

.append("svg")

.attr("width", w)

.attr("height", h);

var bardata = [];

for (var i = 0; i < 25; i++) {

var newNumber = Math.floor(Math.random()\*100);

bardata.push(newNumber);

}

var padding = 1;

var yScale = d3.scaleLinear()

.domain([0, 100])

.range([h, 0]);

var rgbScale = d3.scaleLinear()

.domain([0, 100])

.range([0, 256]);

var xScale = d3.scaleBand()

.domain(d3.range(bardata.length))

.range([0,w])

.padding(0.05);

svg.selectAll("rect")

.data(bardata)

.enter()

.append("rect")

.attr("x", function(d,i){

return xScale(i);

})

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

.attr("width", xScale.bandwidth())

.attr("height", function(d){return h - yScale(d);})

.attr("fill", function(d) {

return "rgb(0,0, "+Math.floor(rgbScale(d))+")";

});

svg.selectAll("rect")

.on("mouseover", function(d){

d3.select(this)

.attr("fill", "orange");

});

svg.selectAll("rect")

.on("mouseout", function(d){

d3.select(this)

.transition()

.duration(250)

.attr("fill", function(d) {

return "rgb(0,0, "+Math.floor(rgbScale(d))+")";

});

});

var add = d3.select("body")

.append("p")

.text("Agregar Dato");

add.on("click", function(){

bardata.push(Math.floor(Math.random() \* 100));

svg.selectAll("rect")

.data(bardata)

.enter()

.append("rect")

.attr("x", w)

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

.attr("width", xScale.bandwidth())

.attr("height", function(d){return h - yScale(d);})

.attr("fill", function(d) {

return "rgb(0,0, "+Math.floor(rgbScale(d))+")";

});

xScale.domain(d3.range(bardata.length));

svg.selectAll("rect")

.transition()

.attr("x", function(d,i){

return xScale(i);

})

.attr("width", xScale.bandwidth());

});

</script>

</body>