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Panel : C

Roll No. : PC 33

Subject: BDA Practical Exam

Problem Statement

11. Create a BAR chart on any data set csv file of your choice using D3.js

Solution:-

HTML FILE:-

```
<!doctype html>
<html>
<head>
    <style>
        .bar {
            fill: #DC143C;
        }
        .bar:hover{
            fill: #FA8072;
            transition: all .2s;
        }
    </style>
    <script src="https://d3js.org/d3.v4.min.js"></script>
<body>
<svg width="1200" height="500"></svg>
<script>
    //create SVG and define scales.
    var svg = d3.select("svg"),
    margin = 200,
        width = svg.attr("width") - margin,
        height = svg.attr("height") - margin
```

```
    svg.append("text")
       .attr("transform", "translate(100,0)")
       .attr("x", 50)
       .attr("y", 50)
       .attr("font-size", "30px")
       .text("Students over 11 Years")

    var xScale = d3.scaleBand().range([0, width]).padding(0.4),
        yScale = d3.scaleLinear().range([height, 0]);

    var g = svg.append("g")
               .attr("transform", "translate(" + 100 + "," + 100 + ")");

    d3.csv("data.csv", function(error, data) {
        if (error) {
            throw error;
        }

        xScale.domain(data.map(function(d) { return d.year; }));
        yScale.domain([0, d3.max(data, function(d) { return d.value; })]);

        g.append("g")
         .attr("transform", "translate(0," + height + ")")
         .call(d3.axisBottom(xScale))
         .append("text")
         .attr("y", height - 250)
         .attr("x", width - 100)
         .attr("text-anchor", "end")
         .attr("stroke", "black")
         .text("Years");

        g.append("g")
         .call(d3.axisLeft(yScale).tickFormat(function(d){
             return d;
         })
         .ticks(10))
         .append("text")
         .attr("transform", "rotate(-90)")
         .attr("y", 6)
         .attr("dy", "-5.1em")
         .attr("text-anchor", "end")
         .attr("stroke", "black")
         .text("No. of students");

        g.selectAll(".bar")
         .data(data)
         .enter().append("rect")
         .attr("class", "bar")
```

```
        .attr("x", function(d) { return xScale(d.year); })
        .attr("y", function(d) { return yScale(d.value); })
        .attr("width", xScale.bandwidth())
        .attr("height", function(d) { return height - yScale(d.value); });
    });
</script>
</body>
</html>
```

Data Set Used :-

year,value

2010, 506

2011, 499

2012, 514

2013, 621

2014, 710

2015, 654

2016, 553

2016, 602

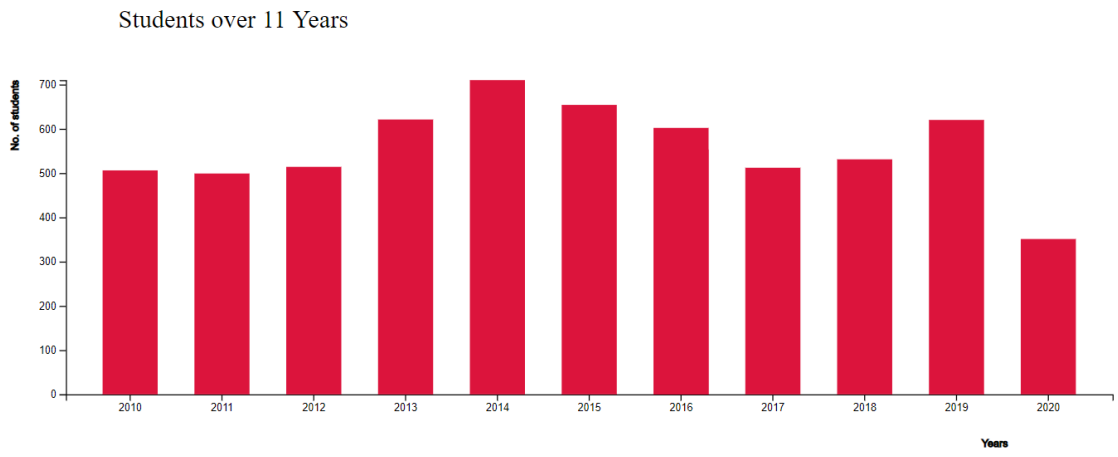
2017, 512

2018, 531

2019, 620

2020, 351

OUTPUTS :-



On hover Color changes :-