Create a **svg_lab.html** and practice all the following svgs and d3 usage by implementing the blue colored codes.
**Lab4 submission:**
1. a working **svg_lab.html** with your **name** and **email** on it.
2. your answers to 1.2 to 1.4

## 1. SVG (Scalable Vector Graphics)

```
<BODY>
…
<svg >
  <line x1="50" y1="50" x2="100" y2="100"  stroke-width="10" stroke="red" />
  <line x1="100" y1="100" x2="200" y2="0"  stroke-width="10" stroke="black" />
</svg>
…

</BODY>
```

```
<svg width="200" height="200">
  <circle cx="50" cy="50" r="40" stroke="black" stroke-width="4" fill="yellow" />
</svg>
```

*More shapes and https://www.w3schools.com/graphics/svg_intro.asp

1.1 How do you draw a rectangle with filling color as yellow? (Hint: https://www.w3schools.com/graphics/svg_intro.asp)

```
<rect width="100" height="20" fill="yellow" stroke="black" y="120" ></rect>
```

1.2 How do you draw **3 rectangles align horizontally** but not overlapping each other, filling colors are respectively yellow orange red?

1.3 How do you draw **3 circles align vertically** but not overlapping each other, filling colors are respectively yellow orange red?

```
<text x="250" y ="320" fill="black">tutorial 1.3</text>
```

1.4 How do you duplicate the graphics in 1.2 at the coordinates (500,0)?  (approximately the

middle of the screen) *Hint: group the svg shapes in <g> </g>  and transform attribute*
(ref: https://www.tutorialspoint.com/d3js/d3js_svg_transformation.htm)

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1.5 Include d3.js to the page, and change the background color to a color of your choice.
…
```
<head>
      <script src="https://d3js.org/d3.v5.min.js"></script>
</head>
<body>
   <script type="text/javascript">
        d3.select("body").style("background-color","#dbf6f3");
   </script>
</body>
…
```

Reference: https://github.com/d3/d3-selection

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* Practice now in the lab and continue doing so at home, draw a smiley face in SVG (submit it via Camino with assign#2 for 5 point bonus)



*Color reference http://www.w3schools.com/cssref/css_colors_legal.asp
*More other d3 tutorial: https://github.com/mbostock/d3/wiki/Tutorials