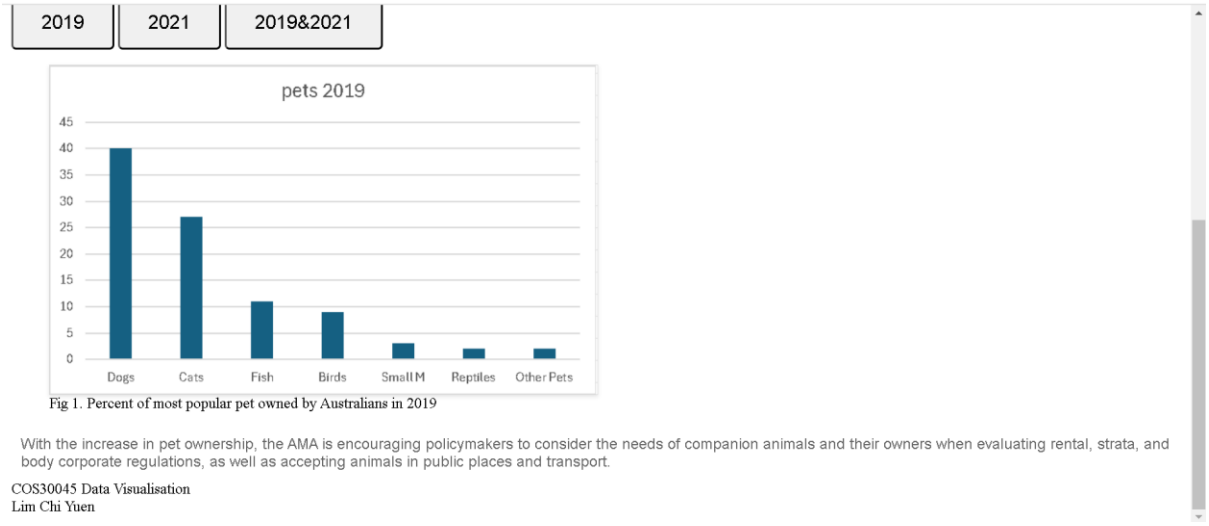
Name: Lim Chi Yuen ID: 104489603

Lab1

Lab Task 1.1

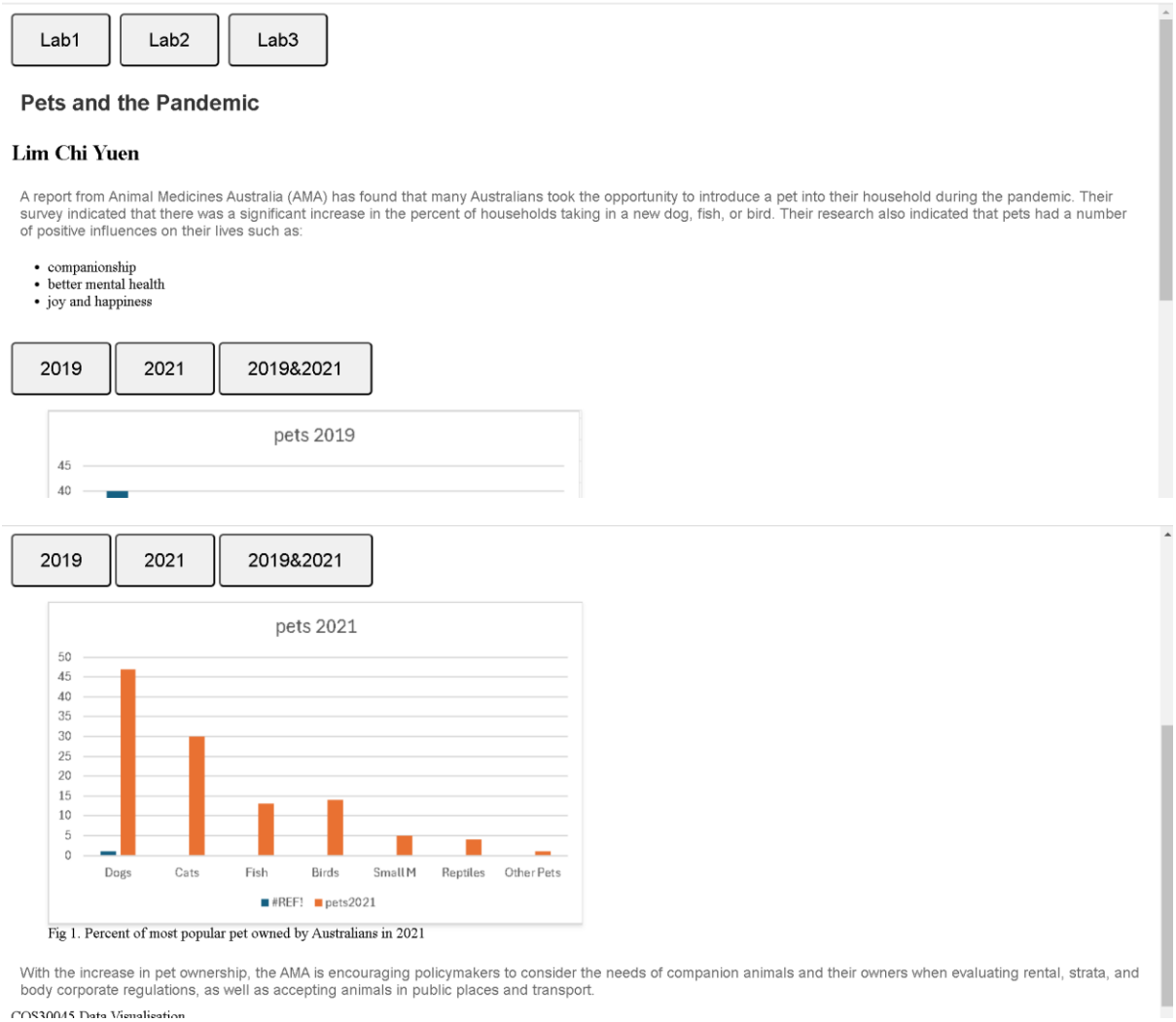
https://github.com/Cylim1507/COS30045/blob/main/COS30045/lab1/lab1-1.html




```
<body>

    <div class="button-container">
        <form method="get" action="lab1-1.html"><button type="submit">Lab1</button></form>
        <form method="get" action="lab1-2.html"><button type="submit">Lab2</button></form>
        <form method="get" action="lab1-3.html"><button type="submit">Lab3</button></form>
    </div>

    <h1>Pets and the Pandemic</h1>
    <h2>Lim Chi Yuen</h2>

    <p>A report from Animal Medicines Australia (AMA) has found that many Australians took the opportunity to introduce a pet ir

    <ul>
        <li>companionship</li>
        <li>better mental health</li>
        <li>joy and happiness.</li>
    </ul>
    <br>

    <img src="pet_ownership_in_australia_table.png" alr="pet_ownership"><br>
    Fig 1. Comparison of Prt Ownership in 2019 and 2021. <a a href=" https://animalmedicinesaustralia.org.au">Sources:Animal Mec
    <br>

    <p>With the increase in pet ownership the AMA are encouraging policy makers to consider the needs of companion animals and t

    <footer>COS30045 Data Visualisation<br>
        Lim Chi Yuen</footer>

</body>
</html>
```

Lab Task 1.2

https://github.com/Cylim1507/COS30045/blob/main/COS30045/lab1/lab1-2.html

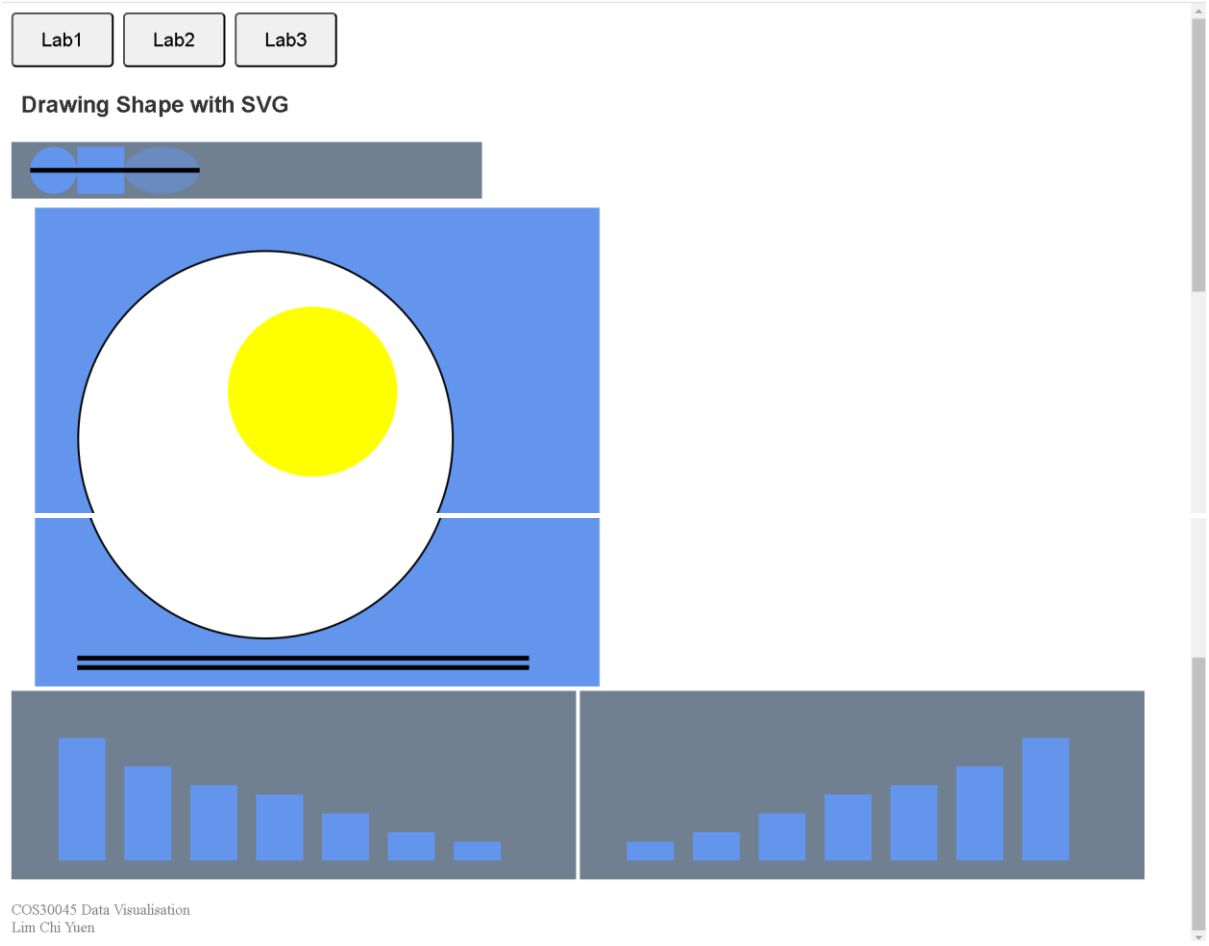



```
<body>

    <p>A report from Animal Medicines Australia (AMA) has found that many Australians took the opportunity to introduce a pet in

    <ul>
        <li>companionship</li>
        <li>better mental health</li>
        <li>joy and happiness</li>
    </ul>
    <br>


    <button onclick="show('pets2019.png', 'Fig 1. Percent of most popular pet owned by Australians in 2019', 'pet2019')">2019</b
    <button onclick="show('pets2021.png', 'Fig 1. Percent of most popular pet owned by Australians in 2021', 'pet2019')">2021</b
    <button onclick="show('pets2019_2021.png', 'Fig 1. Percent of most popular pet owned by Australians in 2019 and 2021', 'pet2

    <!-- Image container -->
    <figure>
        <img id="ChartImg" style="width:50%; display:none;" src="" alt="">
        <figcaption id="ChartCap"></figcaption>
    </figure>

    <p>With the increase in pet ownership, the AMA is encouraging policymakers to consider the needs of companion animals and th

    <footer>COS30045 Data Visualisation<br>
        Lim Chi Yuen</footer>

    <script>
        function show(Image, ImgDesc, ImgAlt) {
            document.getElementById('ChartImg').src = Image;
            document.getElementById('ChartImg').alt = ImgAlt;
            document.getElementById('ChartCap').textContent = ImgDesc; // Update the figcaption
            document.getElementById('ChartImg').style.display = 'block'; // Corrected 'block'
        }
```

Lab Task 1.3

Name: Lim Chi Yuen ID: 104489603

https://github.com/Cylim1507/COS30045/blob/main/COS30045/lab1/lab1-3.html




```
<body>
    <div class="button-container">
        <form method="get" action="lab1-3.html"><button type="submit">Lab3</button></form>
    </div>

    <h1>Drawing Shape with SVG</h1>

    <svg width="500" height = "60" style="background-color:slategrey;">

        <g transform="translate(20,0)">
            <circle cx="25", cy="30", r="25" fill="cornflowerblue" />
            <rect x="50", y="5", width="50", height="50" fill="rgb(100, 149, 237)"/>
            <ellipse cx="140" cy="30" rx="40" ry="25" fill="rgba(100, 149, 237, 0.5)"/>
            <Line x1="0" y1="30" x2="180" y2="30" stroke="black" stroke-width="5" />
        </g>

    </svg>
    <br>

    <svg width="800" height = "500" ">

        <g transform="translate(20,0)">
            <rect x="5", y="5", width="600", height="500" fill="rgb(100, 149, 237)"/>
            <circle cx="250", cy="250", r="200" fill="black" />
            <circle cx="250", cy="250", r="198" fill="white" />
            <circle cx="300", cy="200", r="90" fill="yellow" />
            <Line x1="50" y1="470" x2="530" y2="470" stroke="black" stroke-width="5" />
            <Line x1="50" y1="480" x2="530" y2="480" stroke="black" stroke-width="5" />
        </g>

    </svg>

    <br>
    <svg width="600" height = "200" style="background-color:slategrey;">
```

Name: Lim Chi Yuen ID: 104489603

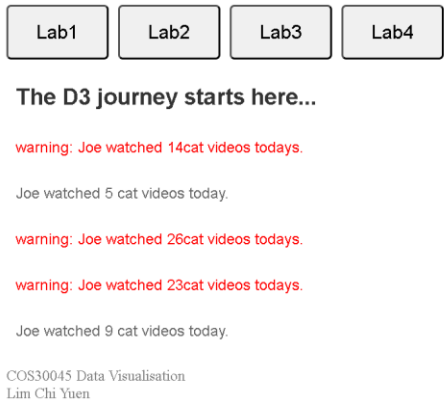
```
    </svg>

    <br>
    <svg width="600" height = "200" style="background-color:slategrey;">

        <g transform="translate(20,0)">
            <rect x="30", y="50", width="50", height="130" fill="rgb(100, 149, 237)"/>
            <rect x="100", y="80", width="50", height="100" fill="rgb(100, 149, 237)"/>
            <rect x="170", y="100", width="50", height="80" fill="rgb(100, 149, 237)"/>
            <rect x="240", y="110", width="50", height="70" fill="rgb(100, 149, 237)"/>
            <rect x="310", y="130", width="50", height="50" fill="rgb(100, 149, 237)"/>
            <rect x="380", y="150", width="50", height="30" fill="rgb(100, 149, 237)"/>
            <rect x="450", y="160", width="50", height="20" fill="rgb(100, 149, 237)"/>

        </g>

    </svg>
    <svg width="600" height = "200" style="background-color:slategrey;">

        <g transform="translate(20,0)">
            <rect x="30", y="160", width="50", height="20" fill="rgb(100, 149, 237)"/>
            <rect x="100", y="150", width="50", height="30" fill="rgb(100, 149, 237)"/>
            <rect x="170", y="130", width="50", height="50" fill="rgb(100, 149, 237)"/>
            <rect x="240", y="110", width="50", height="70" fill="rgb(100, 149, 237)"/>
            <rect x="310", y="100", width="50", height="80" fill="rgb(100, 149, 237)"/>
            <rect x="380", y="80", width="50", height="100" fill="rgb(100, 149, 237)"/>
            <rect x="450", y="50", width="50", height="130" fill="rgb(100, 149, 237)"/>

        </g>

    </svg>
    <br>
    <br>
```

Name: Lim Chi Yuen ID: 104489603

Lab2

Lab Task 2.1

https://github.com/Cylim1507/COS30045/blob/main/COS30045/lab2/lab2-1.html




```
<h1>The D3 journey starts here...</h1>

<script>
//example from murray

    var dataset = [14, 5, 26, 23, 9]

    d3.select("body").selectAll("p")
    .data(dataset)
    .enter()
    .append("p")
    .style("color", function(d){
        if (d>10){
            return "red"
        }
    })
    .text(function(d){
        if (d > 10){
            return "warning: Joe watched "+ d + "cat videos todays. ";
        }
        else{
            return "Joe watched " + d + " cat videos today.";
        }
    });
</script>
```

Server is Started at port : 5500
Source: Live Server
Don't show ag

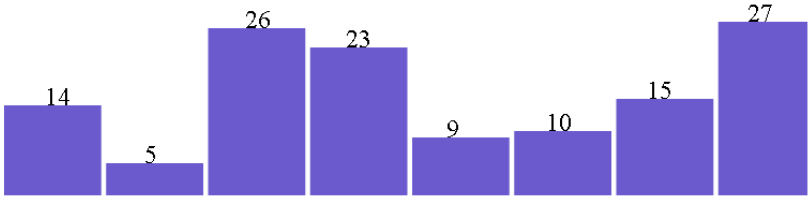
Lab Task 2.2

https://github.com/Cylim1507/COS30045/blob/main/COS30045/lab2/lab2-2.html

Name: Lim Chi Yuen ID: 104489603

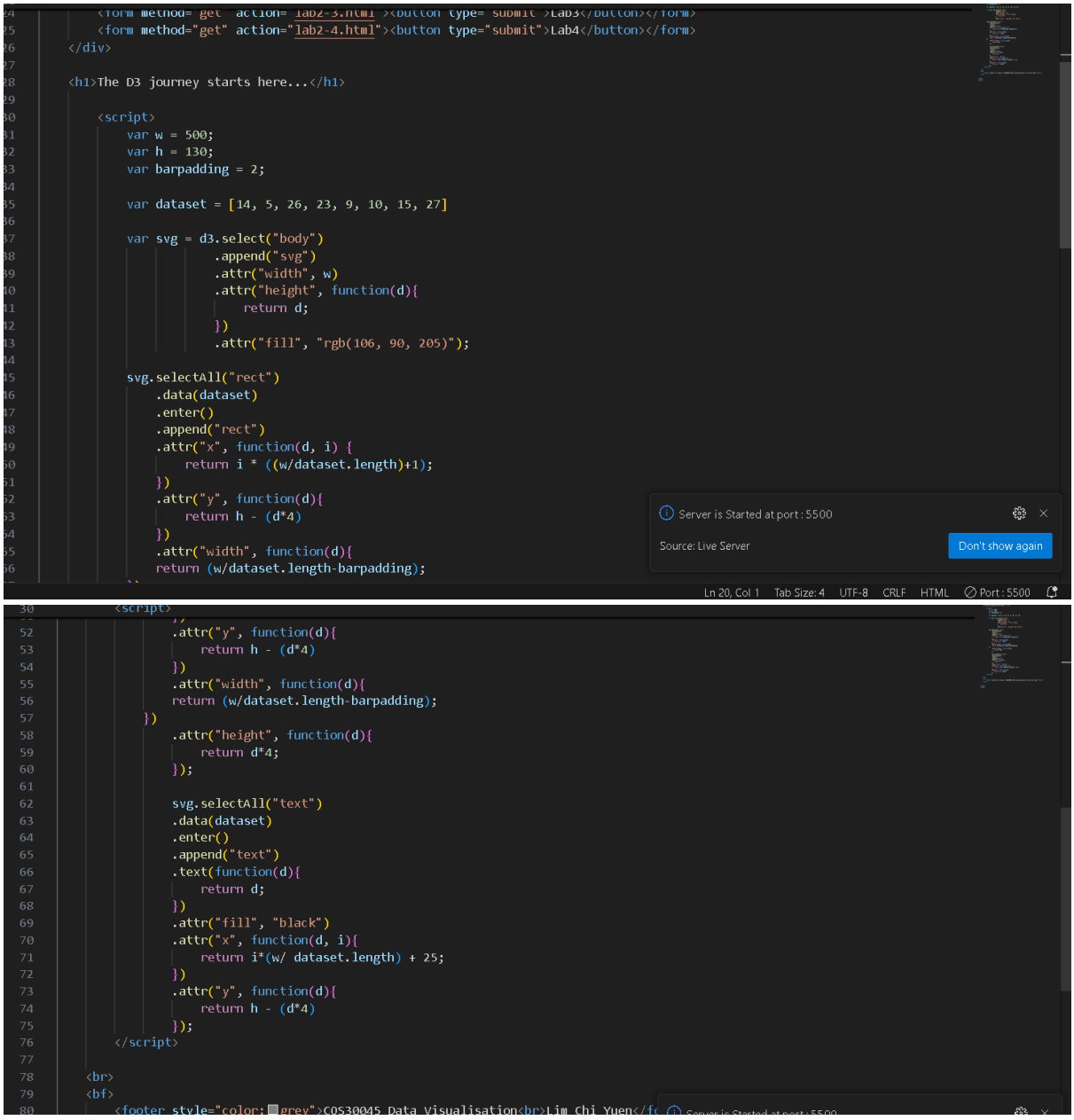
Lab1 Lab2 Lab3 Lab4

The D3 journey starts here...



COS30045 Data Visualisation
Lim Chi Yuen

Name: Lim Chi Yuen ID: 104489603



```
<form method="get" action="lab2-3.html"><button type="submit">Lab3</button></form>
<form method="get" action="lab2-4.html"><button type="submit">Lab4</button></form>
</div>

<h1>The D3 journey starts here...</h1>

<script>
    var w = 500;
    var h = 130;
    var barpadding = 2;

    var dataset = [14, 5, 26, 23, 9, 10, 15, 27]

    var svg = d3.select("body")
                .append("svg")
                .attr("width", w)
                .attr("height", function(d){
                    return d;
                })
                .attr("fill", "rgb(106, 90, 205)");

    svg.selectAll("rect")
        .data(dataset)
        .enter()
        .append("rect")
        .attr("x", function(d, i) {
            return i * ((w/dataset.length)+1);
        })
        .attr("y", function(d){
            return h - (d*4)
        })
        .attr("width", function(d){
        return (w/dataset.length-barpadding);
```

Server is Started at port : 5500
Source: Live Server
Don't show again

Ln 20, Col 1 Tab Size: 4 UTF-8 CRLF HTML Port : 5500


```
<script>
            .attr("y", function(d){
                return h - (d*4)
            })
            .attr("width", function(d){
            return (w/dataset.length-barpadding);
        })
            .attr("height", function(d){
                return d*4;
            });

            svg.selectAll("text")
            .data(dataset)
            .enter()
            .append("text")
            .text(function(d){
                return d;
            })
            .attr("fill", "black")
            .attr("x", function(d, i){
                return i*(w/ dataset.length) + 25;
            })
            .attr("y", function(d){
                return h - (d*4)
            });
    </script>

<br>
<bf>
    <footer style="color:grey">COS30045 Data Visualisation<br>Lim Chi Yuen</f
```

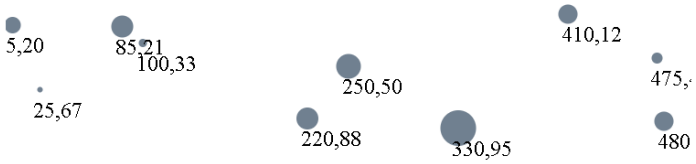
Lab Task 2.3

https://github.com/Cylim1507/COS30045/blob/main/COS30045/lab2/lab2-3.html

Name: Lim Chi Yuen ID: 104489603

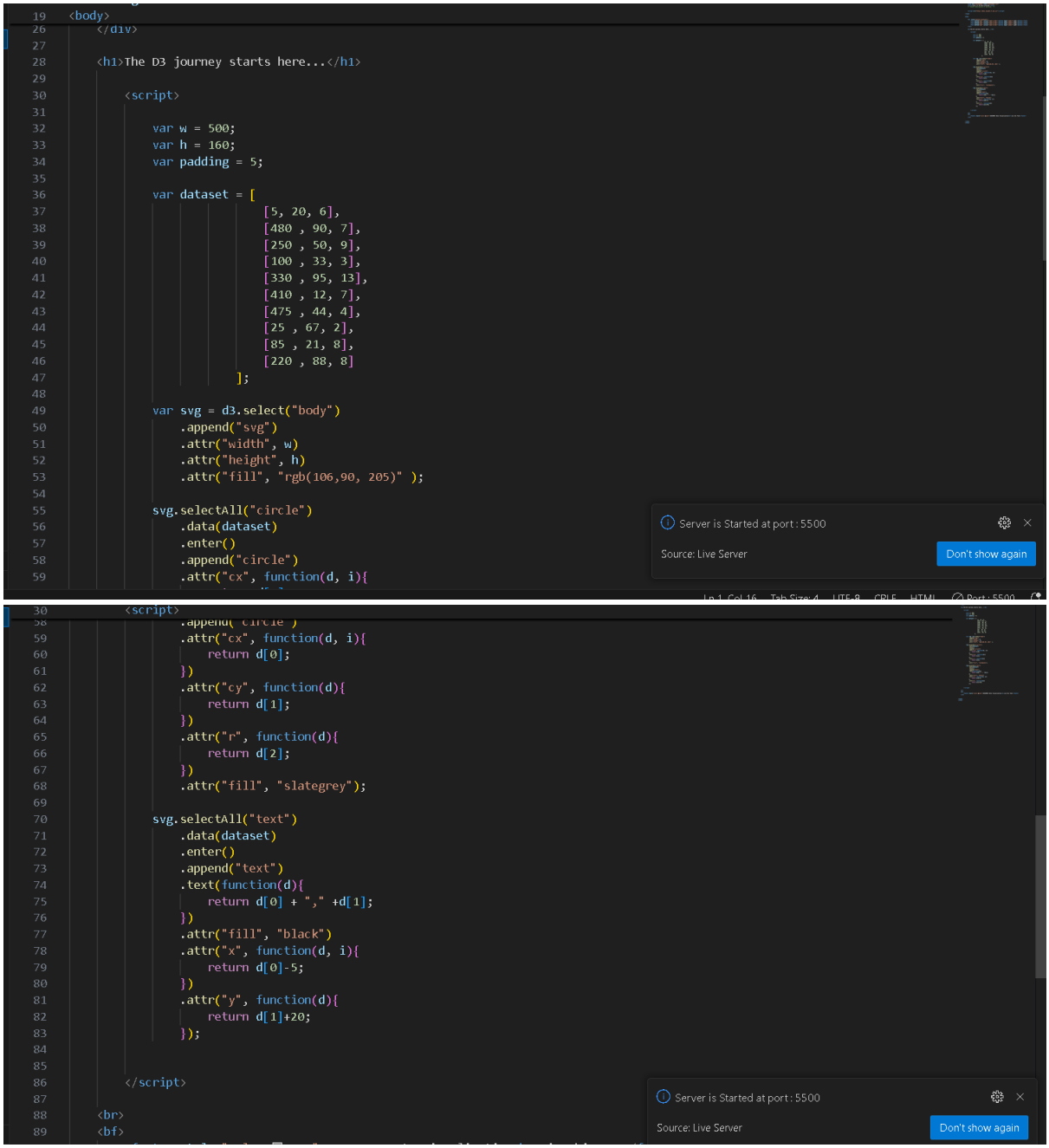
Lab1 Lab2 Lab3 Lab4

The D3 journey starts here...



COS30045 Data Visualisation
Lim Chi Yuen

Name: Lim Chi Yuen ID: 104489603



```
<body>
    </div>

    <h1>The D3 journey starts here...</h1>

        <script>

            var w = 500;
            var h = 160;
            var padding = 5;

            var dataset = [
                        [5, 20, 6],
                        [480 , 90, 7],
                        [250 , 50, 9],
                        [100 , 33, 3],
                        [330 , 95, 13],
                        [410 , 12, 7],
                        [475 , 44, 4],
                        [25 , 67, 2],
                        [85 , 21, 8],
                        [220 , 88, 8]
                    ];

            var svg = d3.select("body")
                .append("svg")
                .attr("width", w)
                .attr("height", h)
                .attr("fill", "rgb(106,90, 205)" );

            svg.selectAll("circle")
                .data(dataset)
                .enter()
                .append("circle")
                .attr("cx", function(d, i){
```

Server is Started at port : 5500
Source: Live Server
Don't show again

```
        <script>
                .attr("cx", function(d, i){
                    return d[0];
                })
                .attr("cy", function(d){
                    return d[1];
                })
                .attr("r", function(d){
                    return d[2];
                })
                .attr("fill", "slategrey");

            svg.selectAll("text")
                .data(dataset)
                .enter()
                .append("text")
                .text(function(d){
                    return d[0] + "," +d[1];
                })
                .attr("fill", "black")
                .attr("x", function(d, i){
                    return d[0]-5;
                })
                .attr("y", function(d){
                    return d[1]+20;
                });


        </script>

    <br>
    <bf>
```

Server is Started at port : 5500
Source: Live Server
Don't show again

Lab Task 2.4

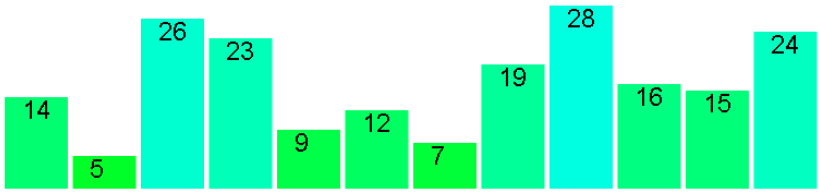
https://github.com/Cylim1507/COS30045/blob/main/COS30045/lab2/lab2-4.html

https://github.com/Cylim1507/COS30045/blob/main/COS30045/lab2/Task_2.4.js

Name: Lim Chi Yuen ID: 104489603

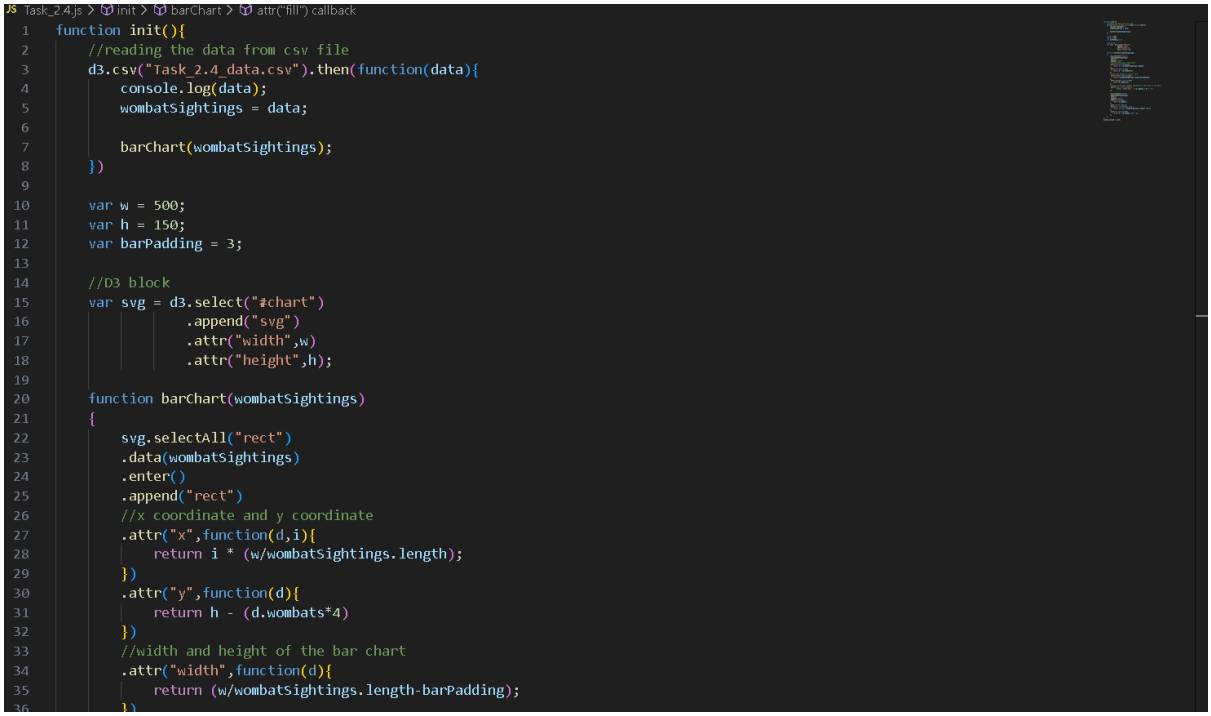
Lab1 Lab2 Lab3 Lab4

The D3 journey starts here...

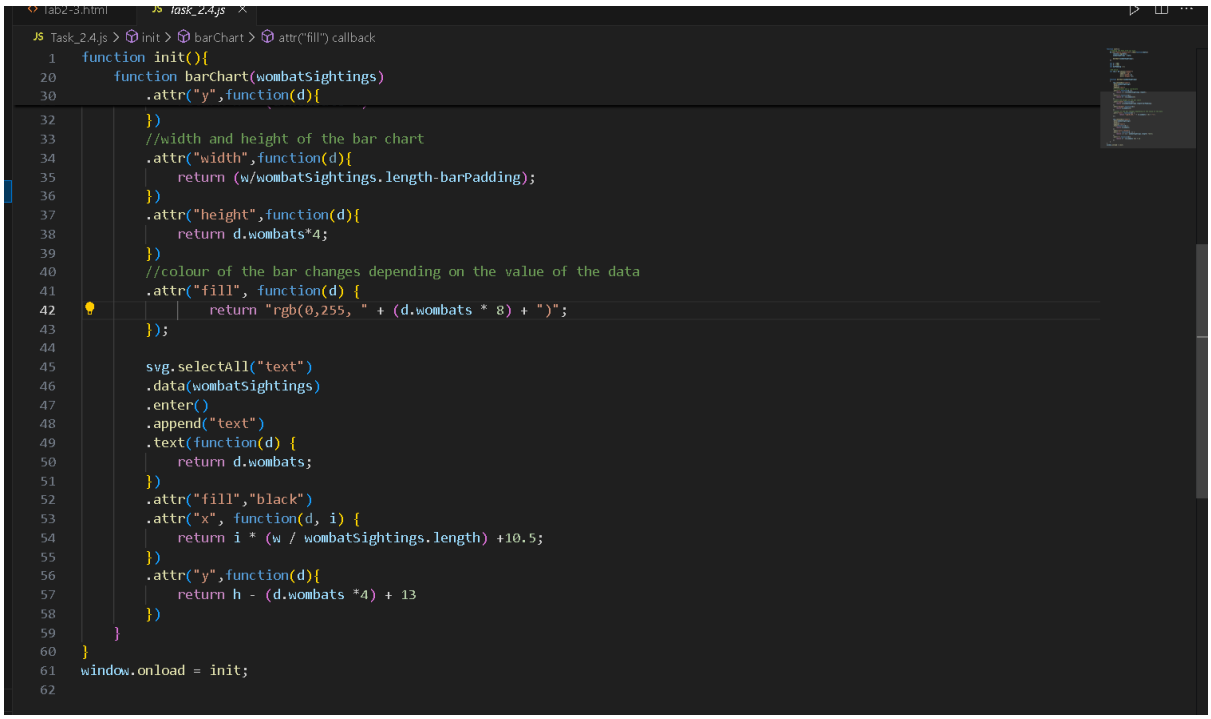


COS30045 Data Visualisation
Lim Chi Yuen

Name: Lim Chi Yuen ID: 104489603



```
function init(){
    //reading the data from csv file
    d3.csv("Task_2.4_data.csv").then(function(data){
        console.log(data);
        wombatSightings = data;

        barChart(wombatSightings);
    })

    var w = 500;
    var h = 150;
    var barPadding = 3;

    //D3 block
    var svg = d3.select("#chart")
                .append("svg")
                .attr("width",w)
                .attr("height",h);

    function barChart(wombatSightings)
    {
        svg.selectAll("rect")
        .data(wombatSightings)
        .enter()
        .append("rect")
        //x coordinate and y coordinate
        .attr("x",function(d,i){
            return i * (w/wombatSightings.length);
        })
        .attr("y",function(d){
            return h - (d.wombats*4)
        })
        //width and height of the bar chart
        .attr("width",function(d){
            return (w/wombatSightings.length-barPadding);
        })
```



```
function init(){
    function barChart(wombatSightings)
        .attr("y",function(d){
        })
        //width and height of the bar chart
        .attr("width",function(d){
            return (w/wombatSightings.length-barPadding);
        })
        .attr("height",function(d){
            return d.wombats*4;
        })
        //colour of the bar changes depending on the value of the data
        .attr("fill", function(d) {
            return "rgb(0,255, " + (d.wombats * 8) + ")";
        });

        svg.selectAll("text")
        .data(wombatSightings)
        .enter()
        .append("text")
        .text(function(d) {
            return d.wombats;
        })
        .attr("fill","black")
        .attr("x", function(d, i) {
            return i * (w / wombatSightings.length) +10.5;
        })
        .attr("y",function(d){
            return h - (d.wombats *4) + 13
        })
    }
}
window.onload = init;
```