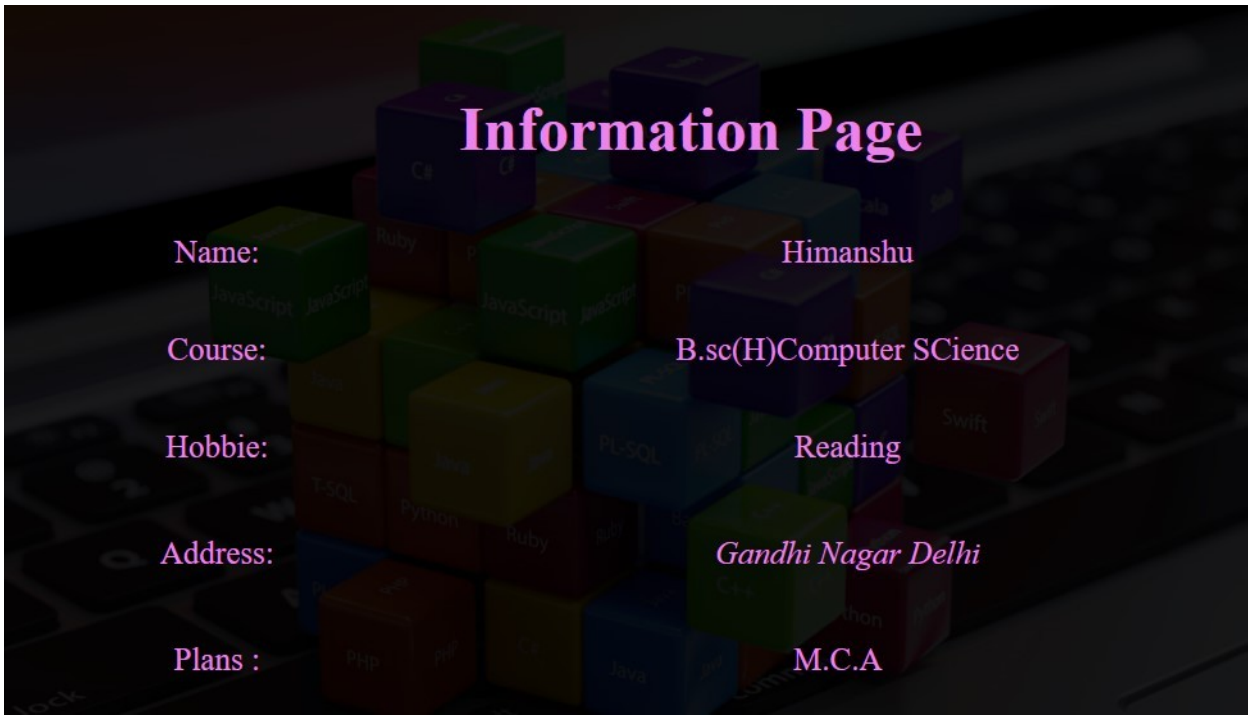
Q3. Create an HTML page that shows information about you, your course, hobbies, address, and your plans. Use CSS for styling of HTML page so that looks nice.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Question 3</title>
    <script type="text/javascript" src="validate.js"></script>
<style>
    *{
     margin: 5px;
     margin-left: 20px;
     padding: 2px;
    }
    .reset{
        background:gray;
        font-size: 24px;
        color:black;
        border-radius: 20px;
    }
    .sub{
        background: rgb(0, 128, 75);
        font-size: 24px;
        color: black;
        border-radius: 20px;
    }
    td{
        font-size: 25px;
        padding: 23px;
    }
    body{
        background: rgba(0, 0, 0, 0.7) url(progra.jpg);
        background-blend-mode: darken;
    }
    .form{
        color:violet;
        align-items: center;
        align-content: center;
        background: rgba(0, 0, 0, 0.9) url(progra.jpg);
        background-blend-mode: darken;
        padding: 32px;
```

```
        text-align: center;
    }
</style>
</head>
<body>
    <form action="#"name="Information Page"class="form" >
        <table cellpadding="2" width="80%"  align="center" cellspacing="2">
            <tr>
                <td colspan="2">
                    <center><font size="14">
                        <b>Information Page</b>
                    </font></center>
                </td>
            </tr>
            <tr>
                <td >
                  Name:
                </td>
                <td><label for="Name">Name</label></td>
            </tr>
            <tr>
                <td >
                  Course:
                </td>
                <td><label for="Course">B.sc(H)Computer SCience</label></td>
            </tr>
            <tr>
                <td >
                  Hobbie:
                </td>
                <td><label for="Hobbie">Reading</label></td>
            </tr>
            <tr>
                <td >
                    Address:

                </td>
                <td> <Address>Gandhi Nagar Delhi</Address> </td>
            </tr>
            <tr>
                <td >
                   Plans :
                </td>
```

```
                <td>
                    M.C.A
                </td>
            </tr>

        </table>
    </form>
</body>
</html>
```

Output



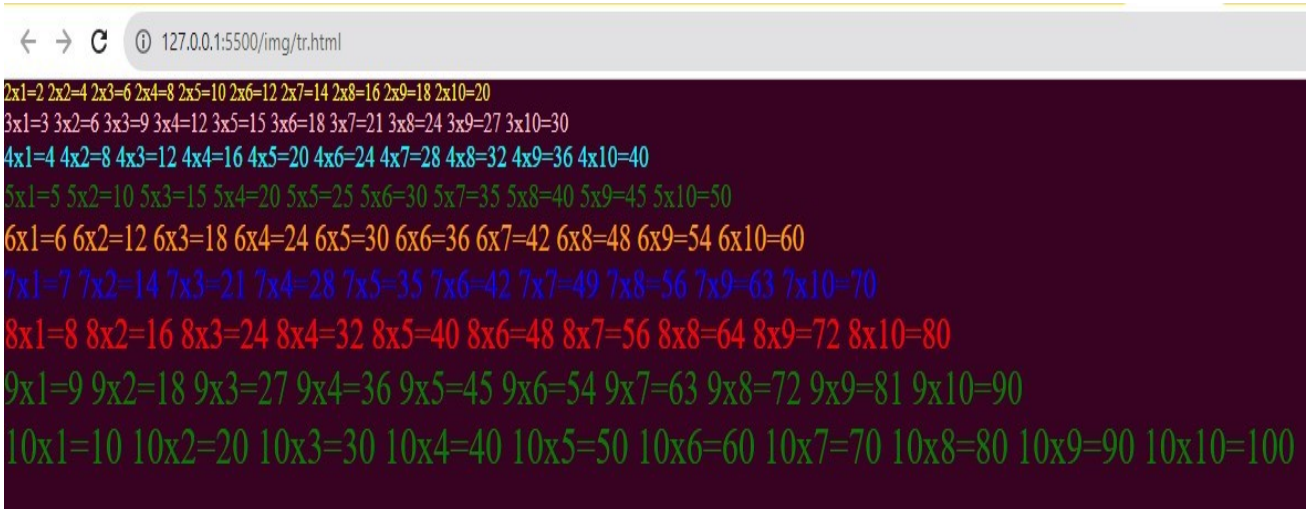
Q4.Create an HTML page with the sole purpose to show multiplication tables of 2 to 10 (row-wise) created by JavaScript. Initially, the page is blank. With help of setInterval function print a row every 5 seconds in different colors and increasing font size.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<style>
    *{
        margin: 0;
        padding: 0;
    }

    .table{
        /* margin: 4px; */
         /* background-color: indianred;  */
        width: 100%;
        /* border: 2px solid black; */
    }
    body{
        background-color: rgb(56, 3, 34);
    }

</style>
<body>
    <p class="table" id="table1"> </p>
    <p class="table" id="table2"> </p>
    <p class="table" id="table3"> </p>
    <p class="table" id="table4"> </p>
    <p class="table"id="table5"> </p>
    <p class="table"id="table6"> </p>
    <p class="table" id="table7"> </p>
    <p class="table"id="table8"> </p>
    <p class="table" id="table9"> </p>
</body>
<script>
   // tb=document.querySelector('.table')
```

```
   let num=2;
let j=1;
let i=0;
let g=14;

    let v=Math.floor(Math.random()*7)
    function table(num,ind){
        const  collection=document.getElementsByClassName("table");
        var co=["red","blue","green","cyan","pink","yellow","orange"];
        v=Math.floor(Math.random()*7)
        collection[ind].style.color=co[v];
        let u=g+"px"

collection[i].style.fontSize=u;
        for(let j=1;j<11;j++){
        let s=num+"x"+j+"="+num*j+" "
        collection[ind].innerHTML+=s;
}

    collection[ind].innerHTML+=('<br>');
    }
function print (){


  table(num,i);
  num++;
  i++;
  g=g+2;
    // if(num>10){
    //     clearInterval(printer);
    // }
    // table(num,i);
    // num++;
    // i++;
    // g=g+4;
    // if(j==11){
    //     g=g+4;

    //     j=1;
    //     num++;
    //     i++;
    // //      g=(Math.floor(Math.random()*20+15));
    // // g=g+(Math.floor(Math.random()*50+15));
```

```
    // }
    // if(i==0 && num==2 &&j==1){
    // //       g=(Math.floor(Math.random()*20+15));
    // // g=g+(Math.floor(Math.random()*50+15));
    //  v=Math.floor(Math.random()*7)
    // }


    // // let g=(Math.floor(Math.random()*20+15));
    // // g=g+(Math.floor(Math.random()*50+15));
    // // let v=Math.floor(Math.random()*5)



    // j++;



}
const printer=setInterval(print,2000);
print()

</script>
</html>
```

Output



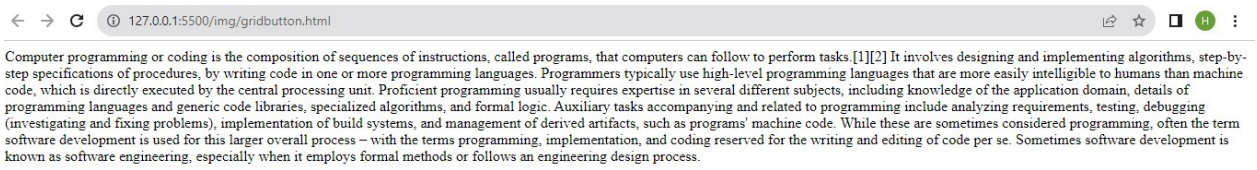
Q5. Create an HTML page with a paragraph written on it and under which 9 buttons are placed in a 3X3 grid. The first row is for buttons labeled with colors names Red, Green, and Blue, the second row with numbers 10, 20, 30, and the third row with different font names. Click event of each of the buttons should make the appropriate change in the style of paragraph.

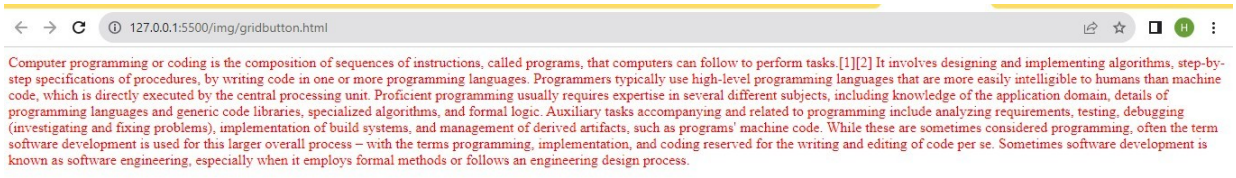
```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<style>
    .grid-container {
        display: grid;
        grid-template-columns: auto auto auto;
        background-color: rgb(8, 35, 61);
        margin-top: 100px;
        padding: 10px;

    }

    .sub {
        font-size: 78px;
        background-color: aqua;
        border: 1px solid rgba(0, 0, 0, .7);
    }
</style>

<body>
    <div class="paragraph" id="para">Computer programming or coding is the
composition of sequences of instructions,
        called programs, that computers can follow to perform tasks.[1][2] It
involves designing and implementing
        algorithms, step-by-step specifications of procedures, by writing code in
one or more programming languages.
```

```
        Programmers typically use high-level programming languages that are more
easily intelligible to humans than
        machine code, which is directly executed by the central processing unit.
Proficient programming usually requires
        expertise in several different subjects, including knowledge of the
application domain, details of programming
        languages and generic code libraries, specialized algorithms, and formal
logic.

        Auxiliary tasks accompanying and related to programming include analyzing
requirements, testing, debugging
        (investigating and fixing problems), implementation of build systems, and
management of derived artifacts, such
        as programs' machine code. While these are sometimes considered
programming, often the term software development
        is used for this larger overall process – with the terms programming,
implementation, and coding reserved for
        the writing and editing of code per se. Sometimes software development is
known as software engineering,
        especially when it employs formal methods or follows an engineering
design process.</div>
    <div class="grid-container">
        <input type="button" value="RED" class="sub" onclick="color('red')">
        <input type="button" value="Green" class="sub" onclick="color('green')">
        <input type="button" value="Blue" class="sub" onclick="color('Blue')">
        <input type="button" value="10" class="sub" onclick="colors(10)">
        <input type="button" value="20" class="sub" onclick="colors(20)">
        <input type="button" value="30" class="sub" onclick="colors(30)">
        <input type="button" value="Arial" class="sub" onclick="colorf('arial')">
        <input type="button" value="Impact" class="sub"
onclick="colorf('Impact')">
        <input type="button" value="Monospace" class="sub"
onclick="colorf('Monospace')">
    </div>
</body>
<script>
    function color(i) {
        var t = document.getElementById("para");
        t.style.color = i;
    }
    function colors(i) {
        var t = document.getElementById("para");
        var p = i + "px"
        t.style.fontSize = p;
```

```
    }
    function colorf(i) {
        var t = document.getElementById("para");
        var p =
            t.style.fontFamily = i;
    }
</script>

</html>
```

Output



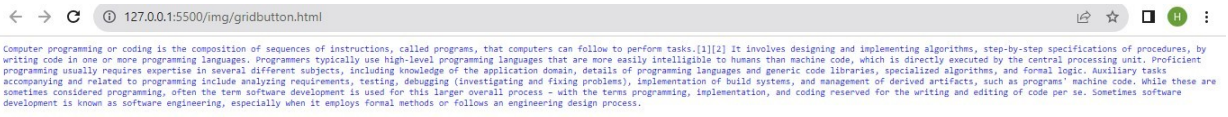


Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks.[1][2] It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages. Programmers typically use high-level programming languages that are more easily intelligible to humans than machine code, which is directly executed by the central processing unit. Proficient programming usually requires expertise in several different subjects, including knowledge of the application domain, details of programming languages and generic code libraries, specialized algorithms, and formal logic. Auxiliary tasks accompanying and related to programming include analyzing requirements, testing, debugging (investigating and fixing problems), implementation of build systems, and management of derived artifacts, such as programs' machine code. While these are sometimes considered programming, often the term software development is used for this larger overall process – with the terms programming, implementation, and coding reserved for the writing and editing of code per se. Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.

RED	Green	Blue

Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks.[1][2] It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages. Programmers typically use high-level programming languages that are more easily intelligible to humans than machine code, which is directly executed by the central processing unit. Proficient programming usually requires expertise in several different subjects, including knowledge of the application domain, details of programming languages and generic code libraries, specialized algorithms, and formal logic. Auxiliary tasks accompanying and related to programming include analyzing requirements, testing, debugging (investigating and fixing problems), implementation of build systems, and management of derived artifacts, such as programs' machine code. While these are sometimes considered programming, often the term software development is used for this larger overall process – with the terms programming, implementation, and coding reserved for the writing and editing of code per se. Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.

RED	Green	Blue
10	20	30
Arial	Impact	Monospace



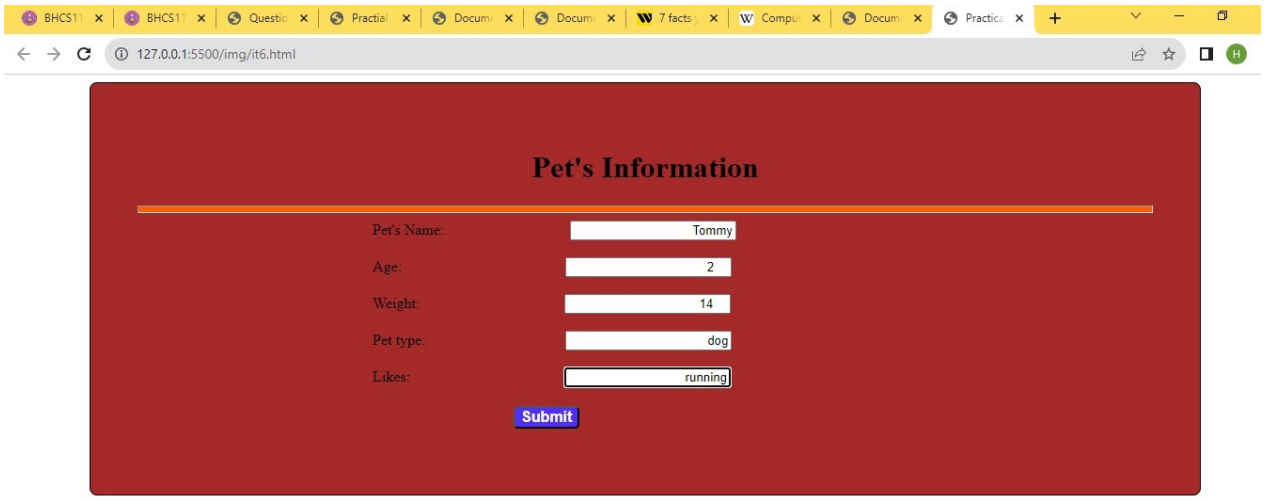
RED	Green	Blue
10	20	30
Arial	Impact	Monospace

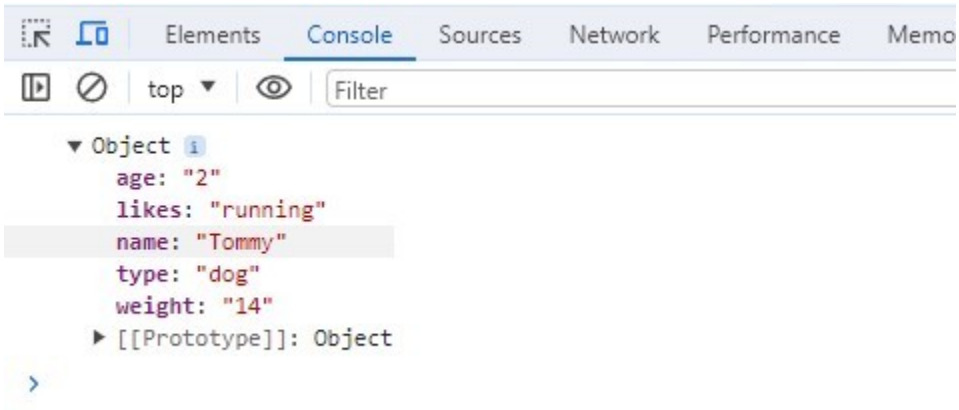
Q6. Create a form that takes data about a pet. The form must be well designed and should accept the pet's name, age, weight, type, and what it likes most. At the submission of this form create a Pet object in JavaScript filled with these values and log that object and equivalent JSON on the console.

```
<!DOCTYPE html>
<html>

<head>
    <meta charset="utf-8">
    <title>Practical 6</title>
    <style type="text/css">
        .container {
            width: 80%;
            margin: auto;
            border: 1px solid black;
            border-radius: 8px;
            padding: 50px;
            background-color: brown;
        }

        .btn-submit {
            border-radius: 5px;
            color: white;
            background: rgb(78, 47, 255);
            font-weight: bold;
            text-align: center;
            font-size: 1rem;
            margin: 20px;
            position: relative;
            left: 380px;
        }
        hr{
            height: 6px;
            background-color: rgb(255, 94, 0);
        }
        .label1{
            text-align: right;
            margin-top: 15px;
            margin-left: 250px;

        }
        input{
            text-align: right;
            margin-left: 100px;
        }
        .age{
            margin-left: 170px;
        }
        .name{
            margin-left: 130px;
        }
        .weight{
            margin-left: 150px;
        }
        .pet{
```

```
            margin-left: 145px;
        }
        .like{
            margin-left: 160px;
        }
h1{
    text-align: center;
}
        @media(width<=575) {
            .container {
                width: 90%;
            }
        }
    </style>
</head>

<body>
    <div class="container">
        <h1>Pet's Information</h1>
        <hr> <label for="name" class="label1">Pet's Name:</label>
         <input type="text" name="name" class="name"><br><br>
          <label for="age" class="label1">Age:</label>
          <input type="number" name="age" class="age"> <br> <br>
          <label for="weight" class="label1">Weight:</label> <input type="number" name="weight"
          class="weight"><br><br>
            <label for="type" class="label1">Pet type:</label> <input type="text" name="type"
class="pet"><br><br>
        <label for="likes" class="label1">Likes:</label> <input type="text" name="likes" class="like"><br>
        <button class="btn-submit"
            onclick="display()">Submit</button>
    </div>
    <script
        type="text/javascript"> function display() {
            // event.preventDafault();
             var pet = {};
             var input_fields = document.getElementsByTagName('input');
             for (var i =0; i < input_fields.length; i++) { pet[input_fields[i].name] =
input_fields[i].value; } console.log(pet); } </script>
</body>

</html>
```

Output


127.0.0.1:5500/img/it6.html
Pet's Information
Pet's Name:
Tommy
Age:
2
Weight:
14
Pet type:
dog
Likes:
running
Submit

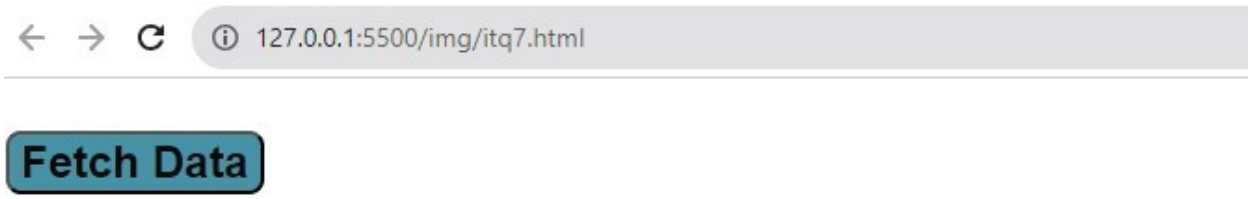

Elements
Console
Sources
Network
Performance
Memo
top
Filter
Object
age: "2"
likes: "running"
name: "Tommy"
type: "dog"
weight: "14"
[[Prototype]]: Object

Q7. Store JSON data of few pets that you created in previous practical in a JSON file (copy from console output of previous program to a .json file). Using AJAX, load data from the file and display it in a presentable way using HTML and CSS.

```
<!DOCTYPE html>
<html>

<head>
    <meta charset="utf-8">
    <title>Practical 7</title>
    <style type="text/css">
        #pet-data {
            border: 1px solid black;
            border-radius: 10px;
            border-collapse: collapse;
        }

        td {
            border: 1px solid black;
            border-collapse: collapse;
        }

        #btn-fetch {
            margin-top: 20px;
            font-size: 24px;
            font-weight: bold;
            background-color: rgb(70, 147, 167);
            color: rgb(14, 9, 9);
            border-radius: 8px;
        }
        #content{
            font-family: Impact, Haettenschweiler, 'Arial Narrow Bold', sans-serif;
            font-size: 26px;
            background: yellow;
        }
    </style>
</head>

<body>
    <div id="content"> </div> <button id="btn-fetch">Fetch Data</button>
    <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
    <script
        type="text/javascript"> var btnFetch = document.getElementById('btn-fetch');
            var content = document.getElementById('content');
            btnFetch.addEventListener('click', () => {
                const xhr = new XMLHttpRequest();

                xhr.open("GET", '\pet.json', true);
                xhr.onload = () => { console.log(xhr.responseText);
                renderHtml(JSON.parse(xhr.responseText)); }
                xhr.send();
            });
            function renderHtml(data) {
                content.innerHTML = ""; for (var i = 0; i <= data.length; i++) {
                    let p = document.createElement('p');
                 let htmlpart = "";
```

```
                htmlpart += data[i].name + " is a " + data[i].type + " with age" + data[i].age + " years
and weight " + data[i].weight + "kg and likes" + data[i].likes;
                p.innerHTML = htmlpart;
                var c= document.getElementById('content');
            //    c.innerHTML=htmlpart;
                content.append(p);
                htmlpart = ""; }
        } </script>
</body>

</html>
```

Output



Pluto is a Pavellion with age3 years and weight 12kg and likeseating, playing with ball

Hulk is a German Sefford with age4 years and weight 22kg and likesBiting, eating flesh

Jerry is a cat with age2.5 years and weight 8kg and likessleeping

Tom is a Mouse with age0.5 years and weight 0.7kg and likesrunning, eating cheese

Chiku is a Rabbit with age1 years and weight 1.2kg and likesrunning, eating carrot

Fetch Data

Q8. Create a plain HTML page for B.Sc. Hons CS course, mentioning details like fee, eligibility criteria, papers with names and credits, and future possibilities after the course. A button for styling should be there at bottom of the page. On clicking on this button JavaScript should redesign the complete page using jQuery in a nice presentable way.

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Practial 8</title>
    <script src="jquery-3.7.1.js"></script>
    <script>
        $(document).ready(function() {


            $("#button").click(function() {
                $("h1").css({
                    "color": "red",
                    "text-align": "center",
                    "background": "cyan",
                    "border-radius": "20%"
                })
                $("body").css({
                    "background": "purple"
                })
                $("td").css({
                    "color": "red",
                    "font-size": "20px",
                    "background-color": "yellow"
                })
                $("h2").css({
                    "color": "Blue",
                    "text-align": "center"
                })
                $("hr").css({
                    "color": "blue",
                    "height": "3px",
                    "background": "blue"
                })

                $(".list1").css("text-align", "center")
                $("li").css({
                    "list-style": "none"
                })
            });
```

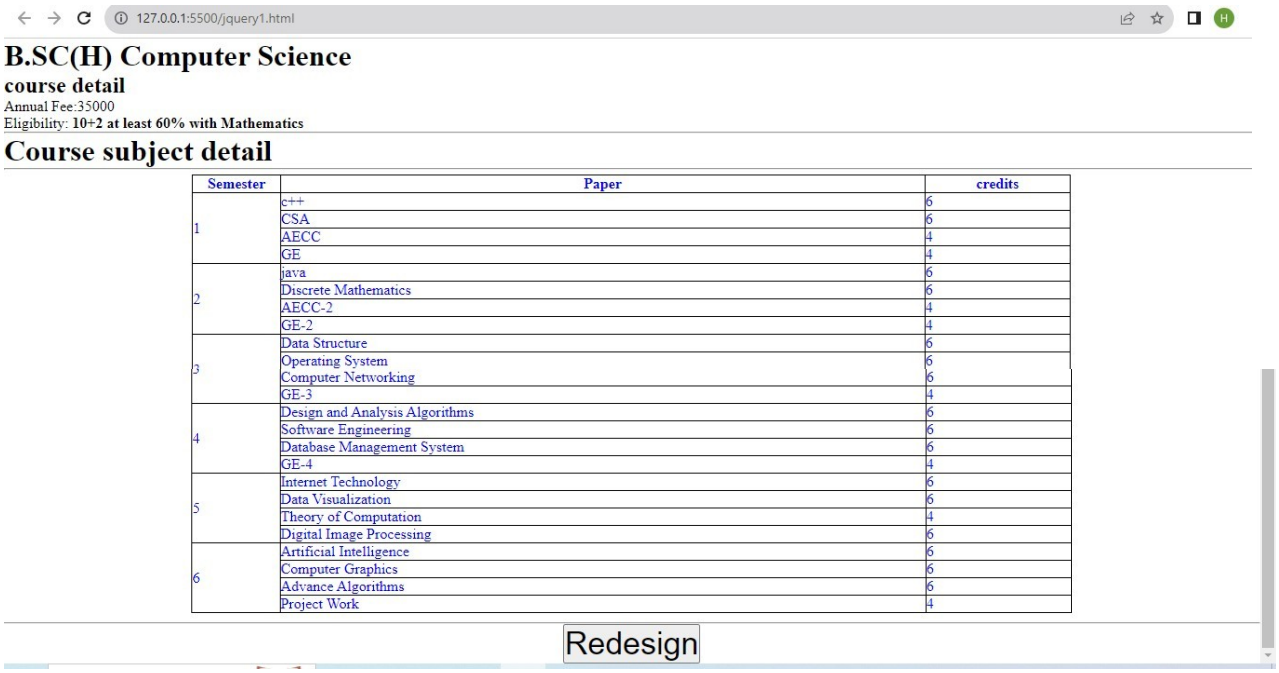
```
        });
    </script>
</head>

<style>
    * {
        margin: 0;
        padding: 0;
    }

    table,
    th,
    td {
        border: 1px solid black;
        border-collapse: collapse;
        color: blue;
        height: 40%;
    }

    table {
        margin-left: auto;
        margin-right: auto;
        margin-top: 5px;
        margin-bottom: 10px;

    }

    .btn {
        text-align: center;
    }

    .btn {
        font-size: 34px;
    }

</style>

<body>
    <H1>B.SC(H) Computer Science</H1>
    <h2>course detail</h2>
    <ul class="list1">
        <li>Annual Fee:35000</li>
        <li>Eligibility: <b>10+2 at least 60% with Mathematics</b></li>
    </ul>
    <hr>
    <h1>Course subject detail</h1>
    <hr>
    <table style="width:70%">
        <tr>
            <th style="width:10%">Semester</th>
            <th>Paper</th>
            <th>credits</th>
        </tr>
        <tr>
            <td rowspan="4">1</td>
            <td>c++</td>
            <td>6</td>
```

```
        </tr>
        <tr>

            <td>CSA</td>
            <td>6</td>
        </tr>

        <tr>

            <td>AECC</td>
            <td>4</td>
        </tr>

        <tr>

            <td>GE</td>
            <td>4</td>
        </tr>

        <tr>
            <td rowspan="4">2</td>
            <td>java</td>
            <td>6</td>
        </tr>
        <tr>

            <td>Discrete Mathematics</td>
            <td>6</td>
        </tr>

        <tr>

            <td>AECC-2</td>
            <td>4</td>
        </tr>

        <tr>

            <td>GE-2</td>
            <td>4</td>
        </tr>

        <tr>
            <td rowspan="4">3</td>
            <td>Data Structure</td>
            <td>6</td>
        </tr>
        <tr>

            <td>Operating System</td>
            <td>6</td>
        </tr>

        <tr>

            <td>Computer Networking</td>
            <td>6</td>
```

```
        </tr>

        <tr>

            <td>GE-3</td>
            <td>4</td>
        </tr>

        <tr>
            <td rowspan="4">4</td>
            <td>Design and Analysis Algorithms</td>
            <td>6</td>
        </tr>
        <tr>

            <td>Software Engineering</td>
            <td>6</td>
        </tr>

        <tr>

            <td>Database Management System </td>
            <td>6</td>
        </tr>

        <tr>

            <td>GE-4</td>
            <td>4</td>
        </tr>

        <tr>
            <td rowspan="4">5</td>
            <td>Internet Technology</td>
            <td>6</td>
        </tr>
        <tr>

            <td>Data Visualization</td>
            <td>6</td>
        </tr>

        <tr>

            <td>Theory of Computation</td>
            <td>4</td>
        </tr>

        <tr>

            <td>Digital Image Processing</td>
            <td>6</td>
        </tr>

        <tr>
            <td rowspan="4">6</td>
            <td>Artificial Intelligence</td>
```

```
            <td>6</td>
        </tr>
        <tr>

            <td>Computer Graphics</td>
            <td>6</td>
        </tr>

        <tr>

            <td>Advance Algorithms</td>
            <td>6</td>
        </tr>

        <tr>

            <td>Project Work</td>
            <td>4</td>
        </tr>
    </table>
    <hr>
    <div class="btn">
        <button class="btn" id="button">Redesign</button>
    </div>
</body>



</html>
```

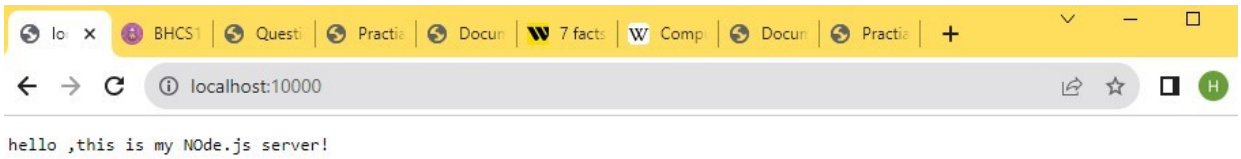
Output



After clicking button

Semester	Paper	credits
1	c++	6
	CSA	6
	AECC	4
	GE	4
2	java	6
	Discrete Mathematics	6
	AECC-2	4
	GE-2	4
3	Data Structure	6
	Operating System	6
	Computer Networking	6
	GE-3	4
4	Design and Analysis Algorithms	6
	Software Engineering	6
	Database Management System	6
	GE-4	4
5	Internet Technology	6
	Data Visualization	6
	Theory of Computation	4
	Digital Image Processing	6
6	Artificial Intelligence	6
	Computer Graphics	6
	Advance Algorithms	6
	Project Work	4

Q10. Create an HTTP server using Node.js which handles requests on port 10000 or a free port beyond 10000. Modify the server in such a way that opening localhost:10000 will display “Hello world, This is my Node.js server” on browser.

```
var http = require('http');

//create a server object:
http.createServer(function (req, res) {
  res.write('hello ,this is my NOde.js server!'); //write a response to the client
  res.end(); //end the response
}).listen(10000);
```

Output