

**Government of Karnataka**

**Department of Collegiate Education**

**Dr.  P. DAYANANDA PAI – P. SATHISHA PAI**

**GOVERNMENT FIRST GRADE COLLEGE CARSTREET MANGALORE**

**LABORATORY CERTIFICATE**

**This is to certify that Mr./Ms has satisfactorily completed the practical works in COMPUTER MULTIMEDIA AND ANIMATION prescribed by the Mangalore University for FOURTH SEMESTER BCA course, in the Laboratory of this college during the year 2023-2024.**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_                                                           \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Lecturer in charge                                                 Head of the Department**

**Name of the Candidate :**

**Registration Number :  U05DP22S0**

**Examination Centre :  Dr. PDP-PSP GFGC MANGALORE**

**Date of Examination :**

**EXAMINERS :**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_                   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**INTERNAL                                                                                                            EXTERNAL**

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| **1.** | **Create a home page for a college website containg all latest HTML5 tags like**  **<article>,<aside>,<nav>,<header>,<footer>,<section>,<figure>.And in <nav>.Create hyper links for courses, facilities and contact details. On clicking**   * **Course hyperlink, display the page with course names offered in the college using ordered list,** * **Facilities hyperlink, display the page describing the facilities using unordered list** * **Contact hyperlink, display the page to show phone number, email and address in separate columns with respective headings.** | **7-11** |
| **2.** | **Design a HTML5 web page containing form with text, password, number, range, email, url, file, submit and reset elements which must be styled using CSS3 according to following screen shot.**    **Note that:**   * **Apply the style exactly same as shown in the above screen shot (with border radius, box shadow and colours).** * **Submit and Reset buttons must change their colour on mouse hovering.** * **Name and passwords should not be empty. If empty, provide error message when submit is clicked.** * **When clicked on submit button email, Profile URLs must be validated for proper input.** * **Contact number must contain only 10 digits not lesser and not more.** * **Clicking on Reset button must clear all fields’ entry.** | **12-15** |
| **3.** | **Create an HTML5 web page which shows a smiling face initially. On every click of ‘Toggle Face’ button display should toggle between smiling face and sad face. Note: Use only one button. And faces should be drawn using canvas element. Faces must be exactly like the following screen shots.** | **16-19** |
| **4.** | **Design a mock login page and style it using CSS3. Initially login page should look like the following screen shot**    **And while mouse is hovered on SUBMIT button it should look like** |  |

|  |  |  |
| --- | --- | --- |
|  | **And while mouse is hovered on SUBMIT button it should look like** | **20-24** |
| **5.** | **Create a web page to model solar system using canvas element animation, where it contains sun, earth and moon (all must be created using canvas shapes not images). Earth should revolve around sun and moon should revolve around earth simultaneously. Sample screen shot below:** | **25-27** |
| **6.** | **Create the following drawing in html page using only SVG** | **28-30** |
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| **SL NO.** | **PART-B** | **PAGE NO.** |
| **1.** | **Create a web page using HTML5 canvas element to show a clock which changes time for every second, minute and hours (as that of an analog clock). Clock should have second, minute and hour needles and minute marking must be there (as shown in screen shot).** | **41-44** |
| **2.** | **Create a web page containing simple calculator which should have basic arithmetic (+,-,\*,/ ) operation on two floating point numbers and show result. Validations to be followed:**   * **. (Decimal point) should be taken only once for an operand.** * **Operand can be negative.** * **Division by zero must be shown proper error message in result. Sample screen shot:** | **45-48** |
| **3.** | **Create a HTML page make a quiz game where user should answer one question at a time, answers must be shown in radio buttons. Without submitting the answer, quiz should not move to next question (Minimum five questions must be there). When user wishes to get score (using score button) score should be displayed in alert 22 message. All the question must be loaded in same page (no page navigation is allowed) Sample screen shot:** | **49-56** |
| **4.** | **Create a web page using HTML/CSS which contains cards (shown as a stack of cards) with image of a tourist place and below that is a thumbnail (shown in circle with image), when mouse hovers over thumbnail corresponding card comes in front and also small description about the tourist place will be displayed. All these must happen using css animation and transition.**  **Initial interface:**    **Interface should look like below screenshot when mouse hovered on thumbnail:**    **(Java script should not be used to animate.)** | **57-62** |
| **5.** | **Create a web page using HTML5/CSS3 to animate a truck movement. While truck moves on mountains and trees should move in the back ground.**  **Output screen shot:**    **Background hills must be created using CSS only and for tree, truck and wheels download the images from the following URLs.**  **https://s3-us-west-2.amazonaws.com/s.cdpn.io/130015/tree.svg https://s3-us-west-2.amazonaws.com/s.cdpn.io/130015/truck.svg https://s3-us-west-2.amazonaws.com/s.cdpn.io/130015/wheels.**  **svg Animation must be implemented using ONLY CSS and Java script should not be used.** | **63-68** |
| **6.** | **Create a simple paint app which draws lines based on the selected colour (chosen using color input) with selected thickness (chosen using number input) and there must be CLEAR button to clear the canvas. Sample screen shot:** | **69-73** |
| **7.** | **Create web page using HTML5 canvas element to illustrate all canvas composition. Output must exactly look like the following screenshot:** | **74-76** |
| **8.** | **Create a web page which must be as shown in below image using HTML5, SVG and CSS3. Here Mountain must be drawn using SVG, Stars in sky changes their position randomly for every time page is loaded (java script can be used). Sky and stars must be created using element.**    **Note: No Online (live access) CSS files must be used.** | **77-82** |

**PART A**

/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*/

**PROGRAM:1 DATE:29-02-2024**

**NAME: REG.NO:U05DP22S0**

/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*/

**Aim: Create a home page for a college website containg all latest HTML5 tags like <article>, <aside>, <nav>, <header>, <footer>, <section>, <figure>. And in <nav>. Create hyper links for courses, facilities and contact details. On clicking**

**• Course hyperlink, display the page with course names offered in the college using ordered list,**

**• Facilities hyperlink, display the page describing the facilities using unordered list**

**• Contact hyperlink, display the page to show phone number, email and address in separate columns with respective headings.**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

**Homepage.html**

<html>

<head><title>GFGC carstreet</title></head>

<body bgcolor="skyblue">

<center><header><h6 style="color blue">Aflitated to Mangalore university</h6></header></center>

<figure><figcaption align="center"><img src="F:\Drive Info\OneDrive\Pictures\Seal\_of\_Karnataka.svg.png"width="100" height="100"></figure>

<center><h2 style+"color red"><strong>DR.P.DAYANANDA PAI-P.SATHISHA PAI

</h2></strong><br>GOVERNMENT FIRST GRADE COLLEGE, MANGALORE

<h3>Carstreet Mangaluru-575001</h3></center>

<article>

<center>

<nav>

<table>

<tr>

<td><a href="F:\CMA programs\Program1\Course.html">Course</a>|</td>

<td><a href="F:\CMA programs\Program1\Facilities.html">Facility</a>|</td>

<td><a href="F:\CMA programs\Program1\Contact.html">contact us</a>|</td>

<tr>

</table>

</nav>

</center>

</article>

<aside>

<section>

<center><img src="F:\Drive Info\OneDrive\Pictures\GFGCc.jpeg" width="400" height="200">

</section>

</aside>

<footer align="center"><p><a href="http://dce.kar.nic.in ">Department of Collegeiate education |

dce.kar.nic.in</a></p>

</footer>

</body>

</html>

**Contact.html**

<html>

<head><title>contact</title></head>

<body bgcolor="grey">

<table style="width:100%">

<colgroup>

<col span="3" style="background-color:pink">

</colgroup>

<tr>

<th><font color="blue">ADDRESS</font></th>

<th><font color="blue">PHONE NUMBER</font></th>

<th><font color="blue">EMAIL</font></th>

</tr>

<tr>

<td width="40%">DR.P.DAYANANDA PAI-P.SATHISHA PAI<br>GOVERNMENT FIRST GRADE COLLEGE<br>

CARSTREET,MANGALORE.<br>

PIN-575001<br>

District-DAKSHINA KANNADA<br>

STATE-KARNATAKA<br>

Google map:<a href="https://maps.app.goo.gl/fDW5YqHKGZKMmceu9">Location</a>

</td>

<td>Phone:0824-2494109 / 2491073<br>

Mobile No:+91 9874561220

</td>

<td>Email:gfgcmangalorecarstreet@rocketmail.com</td>

</tr>

</table>

<br>

<a href="D:\shamith\_chethan\_2bca'a'\homepage.html">HOMEPAGE</a>

</body>

</html>

**Facility.html**

<html>

<head><title>Facilities</title></head>

<body bgcolor="lightgreen">

<h2><font color="Blue">Facilities</font></h2>

<hr>

<p>The college has 1.67 acres of prime land in the heart of the city, on which the following facilities are available.</p>

<ul>

<li>Well furnished Office with the required facilities</li>

<li>CCTV Surveillance</li>

<li>Gym facility</li>

<li>Student Help Desk</li>

<li>Computer lab with 60 computers with high speed internet connection.</li>

<li>Parking area.</li>

</ul>

<br>

<a href="D:\shamith\_chethan\_2bca'a'\homepage.html">HOMEPAGE</a>

</body>

</html>

**Course.html**

<html>

<head><title>course</title></head>

<body bgcolor="yellow">

<h1>Courses</h1>

<h3>PG and UG Course</h3>

<ol>

<li>MA</li>

<li>MCOM</li>

<li>MSW</li>

<li>BCA</li>

<li>BCOM</li>

</ol>

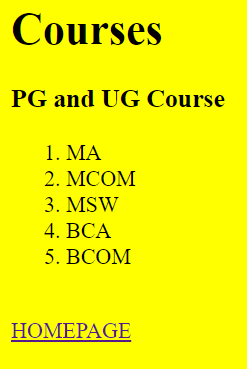
<br>

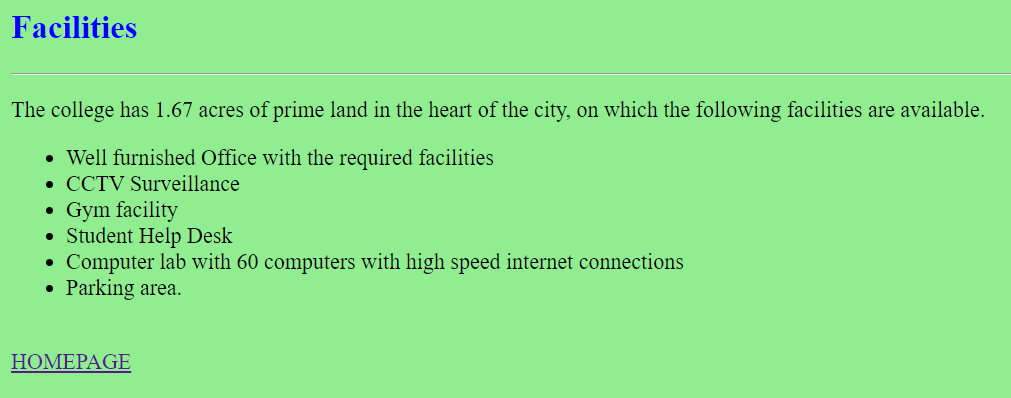
<a href="D:\shamith\_chethan\_2bca'a'\homepage.html">HOMEPAGE</a>

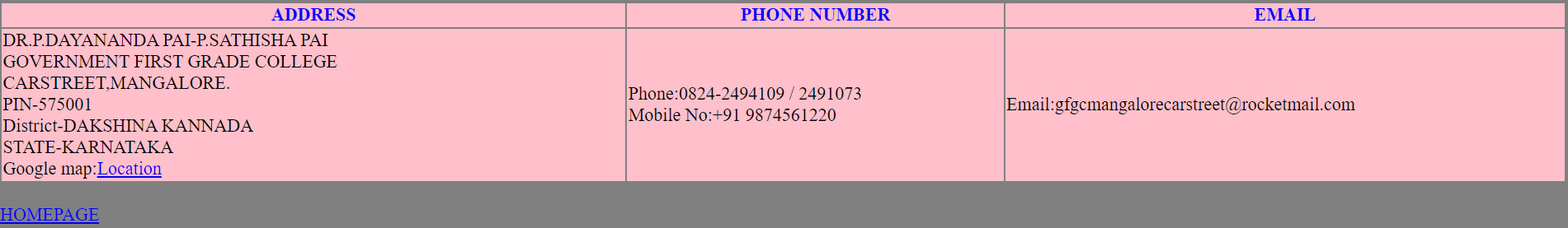
</body>

</html>

**OUTPUT:**





/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*/

**PROGRAM:2 DATE:29-02-2024**

**NAME: REG.NO:U05DP22S0**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**Aim: Design a HTML5 web page containing form with text, password, number, range, email, url, file, submit and reset elements which must be styled using CSS3 according to following screen shot.**

**Note that:**

**• Apply the style exactly same as shown in the above screen shot (with border radius, box shadow and colours).**

**• Submit and Reset buttons must change their colour on mouse hovering.**

**• Name and passwords should not be empty. If empty, provide error message when submit is clicked .**

**• When clicked on submit button email, Profile URLs must be validated for proper input.**

**• Contact number must contain only 10 digits not lesser and not more.**

**• Clicking on Reset button must clear all fields’ entry.**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

<!DOCTYPE html>

<html>

    <style>

        form

        {

            margin:0px auto;

            width:fit-content;

            font-family:sans-serif;

            border:1px grey;

            border-radius:10px;

            box-shadow:rgba(0,0,0,0.8)0 0 10px;

            background-color:silver;

        }

        .button:hover

        {

            background-color:green;

            color:black;

            cursor: pointer;

        }

        </style>

        <body>

            <h1 style="text-align:center;color:green">REGISTRATION FORM</h1>

            <form action= "Outputpage.html" method="post">

                <br>

                Name:<br>

                <input type="text" size="65" name="Name" required placeholder="Enter your name"/><br><br>

                Password:<br>

                <input type="password" size="65"  id="password"name="Password" required placeholder="Enter your password"/><br><br>

                Confirm password:<br>

                <input type="password" size="65"  id="confirm\_password" name="Confirm\_Password" required placeholder="Confirm password"/><br><br>

                Contact number:<br>

                <input type="tel" size="65" name="Contact number" pattern="[0-9]{10}" required placeholder="Enter a number"/><br><br>

                Skill range:<br>

                <input type="range" name="Skil range" width="100px" required/><br><br>

                E-mail address:<br>

                <input type="email" name="E-mail" required placeholder="Enter your E-mail"/><br><br>

                Profile url:<br>

                <input type="url" size="65"  name="Profile" required placeholder="Enter a url"/><br><br>

                Resume:<br>

                <input type="file" id="Resume"name="resume" required/><br>

                <center>

                    <br>

                    <input type="submit" class="button" value="Submit" name="Submit" style="backgroundcolor: green;color:white" />

                    <input type="reset" class="button" value="Reset" name="Reset" style="background-color: green;color:white" />

                    <br>

                </center><br>

                    </form>

                    <script>

                        varpassword=document.getElementById("password"),confirm\_password=document.getElementById("confirm\_password");

                        function validatePassword()

                        {

                            if(password.value!=confirm\_password.value)

                            {

                                confirm\_password.setCustomValidity("Password dont match");

                            }

                            else

                            {

                                confirm\_password.setCustomValidity("");

                            }

                        }

                        password.onchange=validatePassword;

                        confirm\_password.onkeyup=validatePassword;

                    </script>

        </body>

</html>

**OUTPUTPAGE.html**

<html>

    <head>

    </head>

    <body>

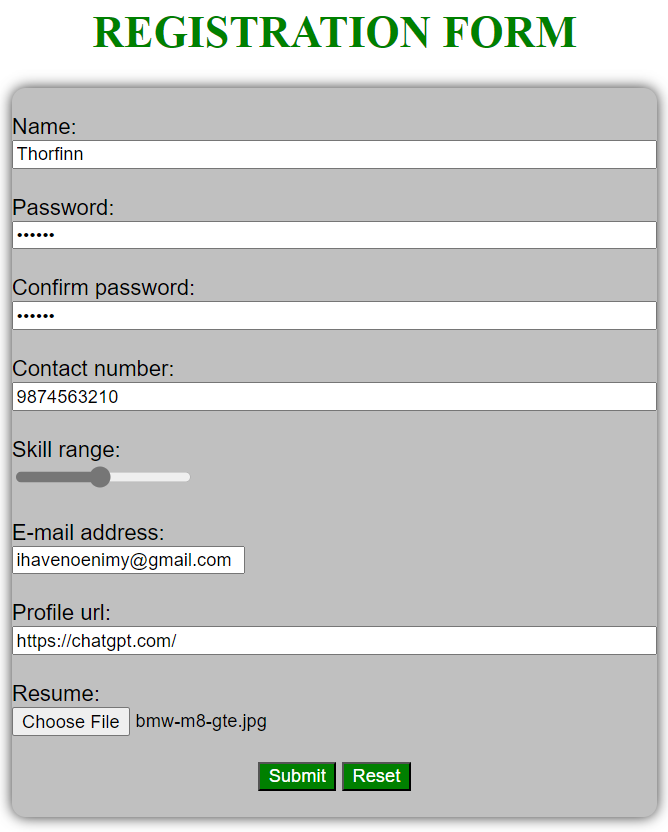
        <h1>Seccesfully registered</h1>

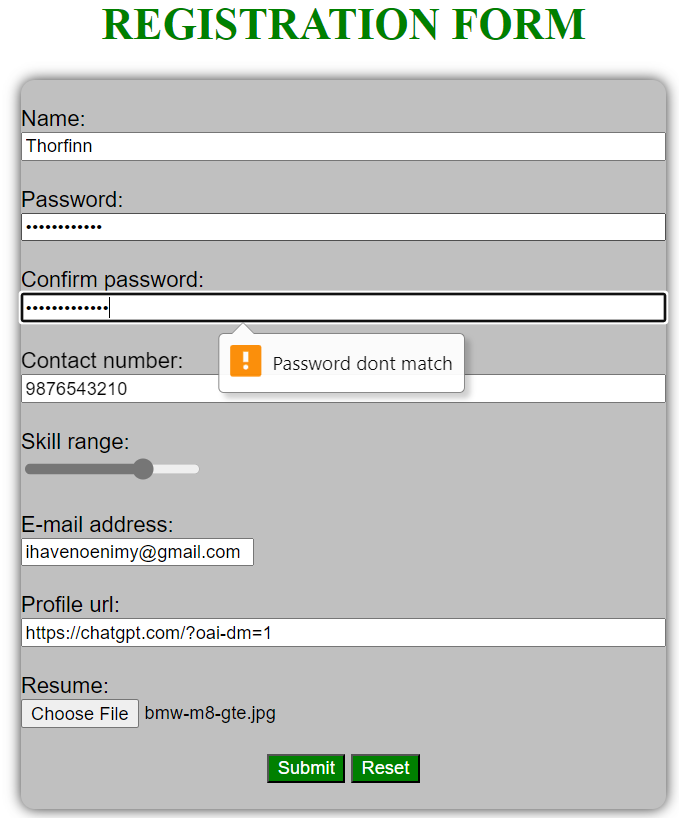
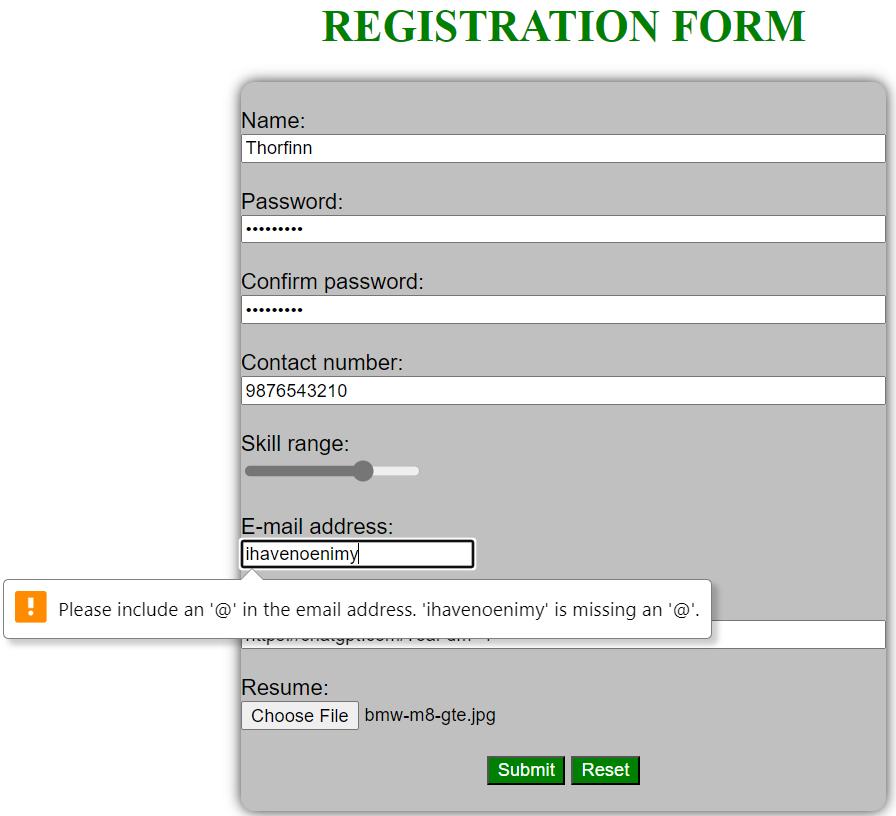
        <h2>Thank you</h2>

    </body>

</html>

**OUTPUT:**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

**PROGRAM:3 DATE:29-02-2024**

**NAME: REG.NO:U05DP22S0**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**Aim: Create an HTML5 web page which shows a smiling face initially. On every click of ‘Toggle Face’ button display should toggle between smiling face and sad face. Note: Use only one button. And faces should be drawn using canvas element. Faces must be exactly like the following screen shots.**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

<!DOCTYPE html>

<html>

    <head><title>Toggle Face</title>></head>

    <style>

        #canvas-container

            {

                border: 2px solid black;

                width:200px;

                height: 200px;

                display:flex;

                justify-content: center;

                align-items: center;

                border-radius: 20px;

                background-color: blue;

                margin-bottom:10px;

            }

            </style>

            <body>

                <div id="canvas-container">

                <canvas id="faceCanvas" width="150" height="150"></canvas>

            </div>

            <button onclick="toggleFace()">Toggle Face</button>

            <script>

                var canvas=document.getElementById("faceCanvas");

                var ctx=canvas.getContext("2d");

                var isSmiling=true;

                //Function to draw a smiling face

                function drawSmile()

                {

                    //draw lips

                    ctx.beginPath();

                    ctx.moveTo(40,100);

                    ctx.quadraticCurveTo(75,155,110,100);

                    ctx.strokeStyle="#000";

                    ctx.lineWidth=4;

                    ctx.stroke();

                }

                function face()

                {

                    //draw circle

                    ctx.clearRect(0,0,canvas.width,canvas.height);

                    ctx.beginPath();

                    ctx.arc(75,75,70,0,Math.PI\*2);

                    ctx.fillStyle="yellow";

                    ctx.fill();

                    //draw eyes

                    ctx.beginPath();

                    ctx.moveTo(35,55);

                    ctx.quadraticCurveTo(50,30,65,55);

                    ctx.strokeStyle="#000";

                    ctx.lineWidth=4;

                    ctx.stroke();

                    ctx.beginPath();

                    ctx.moveTo(90,55);

                    ctx.quadraticCurveTo(105,30,120,55);

                    ctx.strokeStyle="#000";

                    ctx.lineWidth=4;

                    ctx.stroke();

                    //draw nose

                    ctx.beginPath();

                    ctx.moveTo(80,70);

                    ctx.quadraticCurveTo(60,77,80,85);

                    ctx.strokeStyle="#000";

                    ctx.lineWidth=4;

                    ctx.stroke();

                }

                //Function to draw a sad face

                function drawSad()

                {

                    //draw lips

                    ctx.beginPath();

                    ctx.moveTo(40,120);

                    ctx.quadraticCurveTo(70,80,110,120);

                    ctx.strokeStyle="#000";

                    ctx.lineWidth=4;

                    ctx.stroke();

                }

                //function to toggle between the smiling and sad face

                function toggleFace()

                {

                    if(isSmiling)

                    {

                        face();

                        drawSad();

                        isSmiling=false;

                    }

                    else

                    {

                        face();

                        drawSmile();

                        isSmiling=true;

                    }

                }

                //initial drawing of the smiling face

                face();

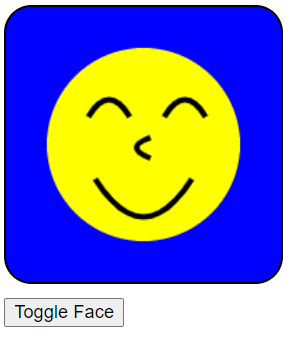
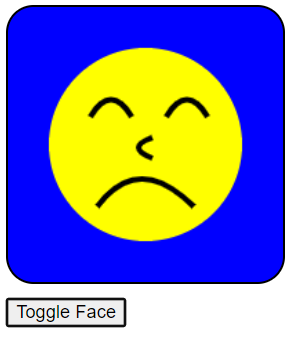
                drawSmile();

            </script>

         </body>

</html>

**OUTPUT:**

** **

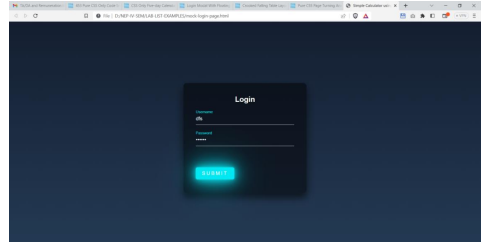
/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*/

**PROGRAM:4 DATE:29-02-2024**

**NAME: REG.NO:U05DP22S0**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/Aim:4. Design a mock login page and style it using CSS3. Initially login page should look like the following screen shot**

**And while mouse is hovered on SUBMIT button it should look like**

****

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

<html>

<head>

    <title>Login Page</title>

    <style>

        body{

            font-family: sans-serif;

            background: linear-gradient(#141e30,#243b55);

            }

            .login-box

            {

                position: absolute;

                top: 50%;

                left:50%;

                width: 400px;

                padding: 40px;

                transform: translate(-50%,-50%);

                background: rgba(0,0,0,.5);

                box-sizing: border-box;

                box-shadow: 0 15px 25px rgba(0,0,0,.6);

                border-radius: 10px;

            }

            .login-box h2

            {

                margin: 0 0 30px;

                padding: 0;

                color: #fff;

                text-align: center;

            }

            .login-box .user-box

            {

                position: relative;

            }

            .login-box .user-box input

            {

                width: 100%;

                padding: 10px 0;

                font-size: 16px;

                color: #fff;

                margin-bottom: 30px;

                outline: none;

                background: transparent;

                border:none;

                padding-bottom: 1px solid #fff;

                border-bottom: 3px solid white;

            }

            .login-box .user-box label

            {

                position: absolute;

                top: 0;

                left: 0;

                padding: 10px 0;

                font-size: 16px;

                color: #fff;

            }

            .login-box .user-box input:focus~label,

            .login-box .user-box input:valid~label

            {

                top: -20px;

                left: 0;

                color: #03e9f4;

                font-size: 12px;

            }

            .login-box form a

            {

                position: relative;

                display:inline-block ;

                padding: 10px 20px;

                color: #03e9f4;

                font-size: 16px;

                text-decoration: none;

                margin-top: 40px;

                letter-spacing: 4px;

            }

            .login-box a:hover

            {

                background: #03e9f4;

                color: #fff;

                border-radius: 5px;

                box-shadow: 0 0 5px #03e9f4,

                            0 0 25px #03e9f4,

                            0 0 50px #03e9f4,

                            0 0 100px #03e9f4;

            }

    </style>

</head>

<body>

    <div class="login-box">

        <h2>Login</h2>

        <form>

            <div class="user-box">

                <input type="text" name="" required="">

                <label>Username</label>

            </div>

            <div class="user-box">

                <input type="password" name="" required="">

                <label>Password</label>

            </div>

            <a href="#">

                SUBMIT

            </a>

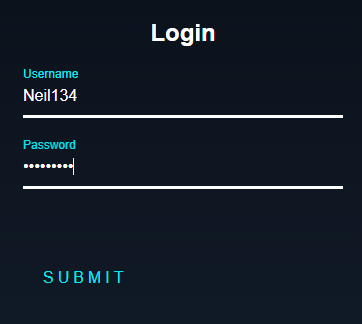
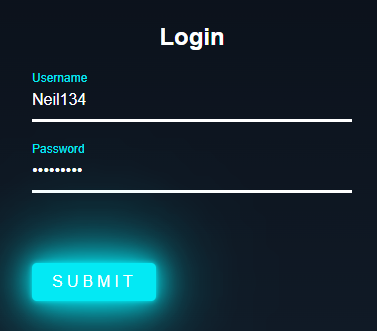
        </form>

    </div>

</body>

</html>

**OUTPUT:**

/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*/

**PROGRAM:5 DATE:29-02-2024**

**NAME: REG.NO:U05DP22S0**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/Aim: Create a web page to model solar system using canvas element animation, where it contains sun, earth and moon (all must be created using canvas shapes not images). Earth should revolve around sun and moon should revolve around earth simultaneously.**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

<!DOCTYPE html>

<html>

    <head>

        <title>Solar System</title>

        <style>

            canvas

            {

                border:2px solid black;

                background-color:navy;

           }

        </style>

    </head>

    <body>

        <canvas id="canvas" width="600" height="600">

        </canvas>

        <script>

            const canvas=document.getElementById('canvas');

            const ctx=canvas.getContext('2d');

*//Define the sun,earth and moon*

            const sun={

                x:canvas.width/2,

                y:canvas.height/2,

                radius:50,

                color:'yellow'

            };

            const earth={

                x:sun.x+200,

                y:sun.y,

                radius:20,

                color:'green',

                angle:0,

                speed:0.0007

            };

             const moon={

                x:earth.x+50,

                y:earth.y,

                radius:10,

                color:'silver',

                angle:0,

                speed:0.0045

            };

            function draw()

            {

                ctx.clearRect(0,0,canvas.width,canvas.height);

                ctx.beginPath();

                ctx.arc(sun.x,sun.y,203,0,Math.PI\*2,false);

                ctx.stroke();

*//Draw the sun*

                ctx.beginPath();

                ctx.arc(sun.x,sun.y,30,0,Math.PI\*2);

                ctx.fillStyle=sun.color;

                ctx.fill();

*//Draw the earth*

                ctx.beginPath();

                ctx.arc(earth.x,earth.y,earth.radius,0,Math.PI\*2);

                ctx.fillStyle=earth.color;

                ctx.fill();

*//Draw the moon*

                 ctx.beginPath();

                ctx.arc(moon.x,moon.y,moon.radius,0,Math.PI\*2);

                ctx.fillStyle=moon.color;

                ctx.fill();

*//Update the earth's position*

                earth.x=sun.x+200\*Math.cos(earth.angle);

                earth.y=sun.y+200\*Math.sin(earth.angle);

                earth.angle+=earth.speed;

*//Update the moon's position*

                 moon.x=earth.x+50\*Math.cos(moon.angle);

                moon.y=earth.y+50\*Math.sin(moon.angle);

                moon.angle+=moon.speed;

*//Request another animation frame*

                requestAnimationFrame(draw);

            }

*//Start the animation loop*

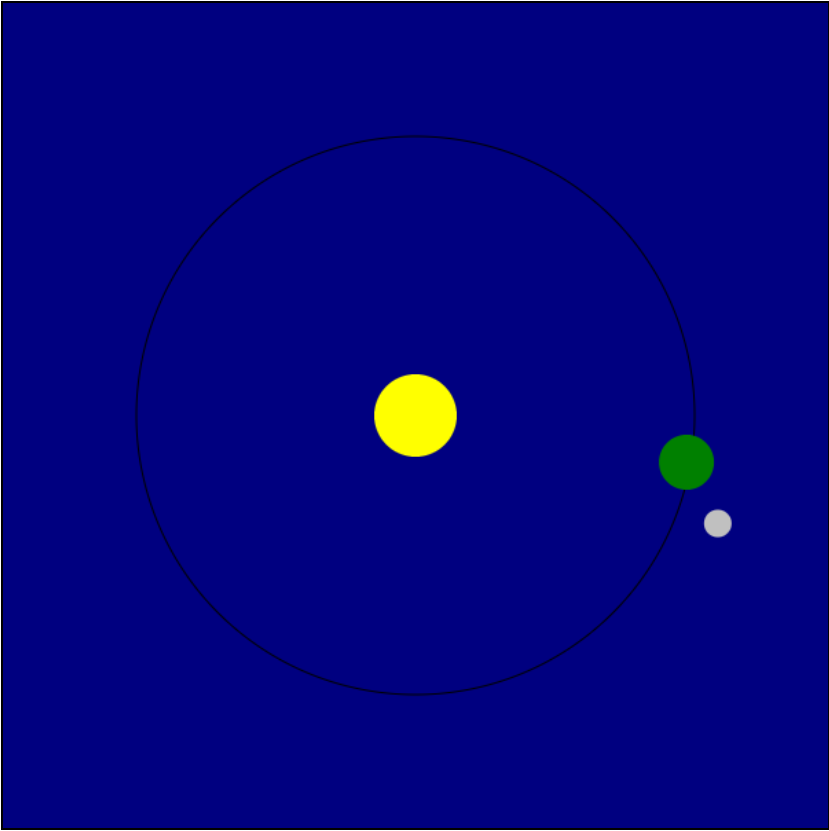
            draw();

        </script>

    </body>

</html>

**OUTPUT:**



/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*/

**PROGRAM:6 DATE:29-02-2024**

**NAME: REG NO:U05DP22S0**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/Aim: Create the following drawing in html page using only SVG.**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**<svg version="1.1"

width="14cm" height="10cm"

viewBox="0 0 7 5">

<defs>

    <g id="wheel" transform="rotate(0)">                                                *<!--A rotating wheel for the cart-->*

<animateTransform attributeName="transform" attributeType="XML" type="rotate" from="360" to="0" dur="0.5s" fill="remove" repeatCount="indefinite"/>

    <circle cx="0" cy="0" r="1" fill="black"/>

    <circle cx="0" cy="0" r="0.8" fill="lightGray"/>

    <rect x="-0.9" y="-0.05" width="1.8" height=".1" fill="black"/>

    <rect x="-0.9" y="-0.05" width="1.8" height=".1" fill="black" transform="rotate(120)"/>

    <rect x="-0.9" y="-0.05" width="1.8" height=".1" fill="black" transform="rotate(240)"/>

    <circle cx="0" cy="0" r="0.2" fill="black"/>

    </g>

    <g id="cart" transform="translate(2.5,0)">                    *<!--A cart made from two wheels and two rects-->*

    <animateTransform attributeName="transform" attributeType="XML" type="translate" from="-3,-0.05" to="11,-0.05" dur="1s" fill="remove" repeatCount="indefinite"/>

    <g transform="scale(0.3,0.3)">

    <use xlink:href="#wheel" transform="translate(-1.5,-0.1) scale(0.8,0.8)"/>

    <use xlink:href="#wheel" transform="translate(1.5,-0.1) scale(0.8,0.8)"/>

    <rect x="-3" y="0" width="6" height="2" fill="#CC0000"/>

    <rect x="-2.3" y="1.9" width="2.6" height="1" fill="#CC0000"/>

    </g>

    </g>

    <g id="sun" fill="yellow" stroke="#DD8800" stroke-width="0.03" *<!--rotating sun-->*

    <animateTransform attributeName="transform" attributeType="XML" type="rotate" from="0" to="360" dur="0.5s" fill="remove" repeatCount="indefinite"/>

    <line x1="-0.75" y1="0" x2="0.75" y2="0"/>

    <line x1="-0.75" y1="0" x2="0.75" y2="0" transform="rotate(30)"/>

    <line x1="-0.75" y1="0" x2="0.75" y2="0" transform="rotate(60)"/>

    <line x1="-0.75" y1="0" x2="0.75" y2="0" transform="rotate(90)"/>

    <line x1="-0.75" y1="0" x2="0.75" y2="0" transform="rotate(120)"/>

    <line x1="-0.75" y1="0" x2="0.75" y2="0" transform="rotate(150)"/>

    <circle cx="0" cy="0" r="0.5"/>

    </g>

    <Polygon id="vane" points="0,0 0.5,0.1 1.5,0 0.5,-0.1" fill="rgb(225,200,200)" stroke="rgb(150,100,100)" stroke-width="0.015"></Polygon>

    <g id="windmill">                                                               *<!--A windmill with a rotating set of three vanes-->*

    <rect x="-0.05" y="0" width="0.1" height="3" fill="#AA9999"/>

    <g transform="translate(0,3)">

    <g transform="rotate(0)">                                                        *<!--the set of three rotating vanes-->*

    <animateTransform attributeName="transform" attributeType="XML" type="rotate" from="360" to="0" dur="0.2s" fill="remove" repeatCount="indefinite"/>

    <use xlink:href="#vane"/>

    <use xlink:href="#vane" transform="rotate(120)"/>

    <use xlink:href="#vane" transform="rotate(240)"/>

    </g>

    </g>

    </g>

    </defs>

    <g transform="translate(0,4) scale(1,-1)">

    <rect x="0" y="-1" width="7" height="5" fill="rgb(220,230,225)"/>                   *<!--sky as background-->*

    <Polygon points="0,-1 0,0.8 1.5,1.65 1.8,1.3 3,2.1 4.7,0.7,6.1,1.2,7,0.8,7,-1" fill="green"/>  *<-Mountains-->*

    <rect x="0" y="-0.4" width="7" height="0.8" fill="rgb(80,80,95)"/>                   *<!--Road-->*

    <rect x="0" y="-0.02" width="7" height="0.04" fill="rgb(220,230,255)"/>                *<!--Stripe in road-->*

    <use xlink:href="#sun" transform="translate(5.8,3.2)"/>                                 *<!--Sun-->*

    <use xlink:href="#windmill" transform="translate(0.75,1) scale(0.6,0.6)"/>            *<!--Three Windmill-->*

    <use xlink:href="#windmill" transform="translate(2.2,1.3) scale(0.4,0.4)"/>

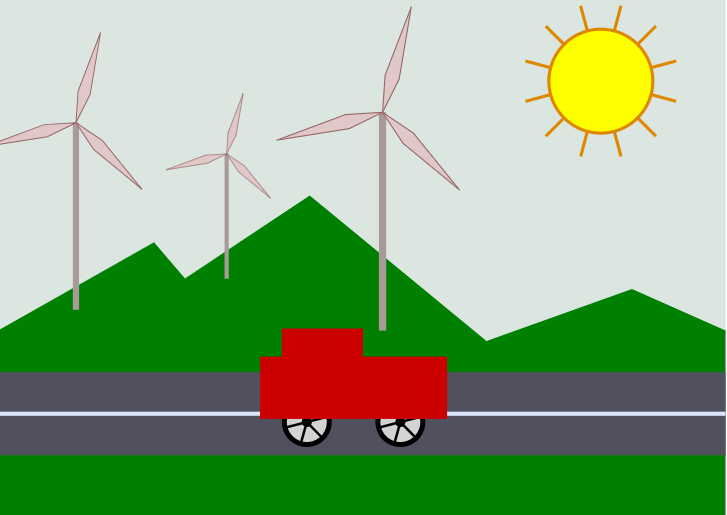
    <use xlink:href="#windmill" transform="translate(3.7,0.8) scale(0.7,0.7)"/>

    <use xlink:href="#cart"/>                                                  *<!--Cart-->*

    </g>

    </svg>

**OUTPUT:**



/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*/

**PROGRAM:7 DATE:29-02-2024**

**NAME: REG NO.:U05DP22S0**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/Aim:** **Create the following drawing using SVG.**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

<!DOCTYPE html>

<html>

<head>

<title>SVG Lion</title>

</head>

<body>

<svg height="800" width="960" xmlns="http://www.w3.org/2000/svg">

<path d="M 150 80 Q 235 30 290 80" stroke="black" fill="orange" />

<g id="fur">

<path d="M 120 100 Q 100 70 150 80" stroke="black" fill="orange"/>

<path d="M 120 100 Q 60 150 120 150" stroke="black" fill="orange" />

<path d="M 120 150 Q 60 200 120 200" stroke="black" fill="orange" />

<path d="M 120 200

Q 60 270 120 270

Q 140 320 180 300

Q 160 340 220 335

" stroke="black" fill="orange" />

</g>

<use xlink:href="#fur" transform="translate(440,0) scale(-1,1)" />

<rect x="120" y="80" width="200" height="150" fill="orange"></rect>

<polygon points="130,230 220,335 300,230" fill="orange" />

<g id="ear">

<ellipse cx="163" cy="120" rx="22" ry="25" stroke="black" fill="yellow" transform="rotate(-35,163,120)" />

<circle cx="165" cy="123" r="15" stroke="black" fill="hotpink" />

</g>

<use xlink:href="#ear" transform="translate(440,0) scale(-1,1)" />

<g id="face">

<path d="M 165 135 Q 90 245 190 275" stroke="black" fill="yellow" />

</g>

<use xlink:href="#face" transform="translate(440,0) scale(-1,1)" />

<polygon points="165,135 275, 135 250,275 190,275" fill="yellow" />

<path d="M 165 135 Q 235 70 275 135" stroke="black" fill="yellow" />

<path d="M 190 275 Q 225 290 250 275" stroke="black" fill="yellow" />

<g id="eye">

­ <path d="M 178 148 Q 190 130 203 148" stroke="black" fill="transparent" />

<ellipse cx="192" cy="167" rx="9" ry="13" stroke="black" fill="white" />

<ellipse cx="192" cy="170" rx="8" ry="10" />

</g>

<use xlink:href="#eye" transform="translate(50,0)" />

<ellipse cx="217" cy="227" rx="10" ry="15" fill="black" />

<circle cx="195" cy="220" r="22" fill="hotpink" />

<circle cx="240" cy="220" r="22" fill="hotpink" />

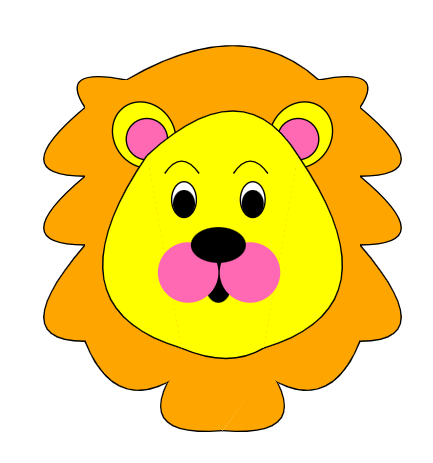
<ellipse cx="217" cy="200" rx="20" ry="13" fill="black" />

</svg>

</body>

</html>

**OUTPUT:**



/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*/

**PROGRAM:8 DATE:29-02-2024**

**NAME: REG NO:U05DP22S0**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/Aim: Create a web page using HTML and CSS to create a timetable as follows:**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**<html>

<head><title>TIME TABLE</title>

<link rel="stylesheet" href="stylesheet.css">

</head>

<body>

    <header>

        <h1> COLLEGE TIME TABLE</h1>

    </header>

    <table>

        <th>

            <tr>

                <td id="SUB1"></td>

                <td id="SUB">8:30-9:30</td>

                <td id="SUB">9:30-10:30</td>

                <td id="SUB">10:30-11:30</td>

                <td id="SUB">11:30-12:30</td>

                <td id="SUB">12:30-2:30</td>

                <td id="SUB">2:00-3:00</td>

                <td id="SUB">3:00-4:00</td>

                <td id="SUB">4:00-5:00</td>

            </tr>

        </th>

        <tr>

            <td id="SUB">MONDAY</td>

            <td id="blank">-----</td>

            <td id="box1">SUB1</td>

            <td id="box2">SUB2</td>

            <td id="box3">SUB3</td>

            <td rowspan="6">L<br>U<br>N<br>C<br>H</td>

            <td id="box4">SUB4</td>

            <td id="box5">SUB5</td>

            <td id="S"><b>COUNSELLING CLASS</b></td>

</tr>

        <tr>

            <td id="SUB">TUESDAY</td>

            <td id="box1">SUB1</td>

            <td id="box2">SUB2</td>

            <td id="box3">SUB3</td>

            <td id="blank">-----</td>

            <td id="box2">SUB2</td>

            <td id="box2">SUB2</td>

            <td id="SUB2">LIBRARY</td>

        </tr>

        <tr>

            <td id="SUB">WEDNESDAT</td>

            <td id="box1">SUB1</td>

            <td id="box2">SUB2</td>

            <td id="box5">SWA</td>

            <td id="blank">-----</td>

            <td colspan="3" id="SUB3"><b>LAB</b></td>

        </tr>

        <tr>

            <td id="SUB">THUSDAY</td>

            <td id="box1">SUB1</td>

            <td id="box2">SUB2</td>

            <td id="box3">SUB3</td>

            <td id="blank">-----</td>

            <td id="box2">SUB2</td>

            <td id="box2">SUB2</td>

            <td id="SUB2">LIBRARY</td>

        </tr>

        <tr>

            <td id="SUB">FRIDAY</td>

            <td id="box1">SUB1</td>

            <td id="box2">SUB2</td>

            <td id="box3">SUB3</td>

            <td id="blank">-----</td>

            <td id="box4">SUB4</td>

            <td id="box5">SUB5</td>

            <td id="SUB2">LIBRARY</td>

        </tr>

        <td id="SUB">SATURDAY</td>

            <td id="box1">SUB1</td>

            <td id="box2">SUB2</td>

            <td colspan="3" id="SEMINAR"><b>SEMINAR</b></td>

            <td id="box4">SUB4</td>

            <td id="box5">SUB5</td>

            <td id="SUB2">LIBRARY</td>

    </table>

</body>

</html>

CSS code

body

{

    background-color:#ffffff;

    mix-blend-mode:darken;

}

header h1

{

    margin-top:10%;

    text-align:center;

    color:black;

    font-weight:bold;

    font-family:sans-serif;

}

table

{

    margin-top:2%;

    width:max-content;

    border:1px solid black;

    height:300px;

    margin-left:30%;

}

td

{

    text-align:center;

    border:1px solid black;

}

#blank

{

    color:#000;

    background-color:#fff

}

#S

{

    font:weight 800;

    text-transform:uppercase;

    font-family:san-serif;

    background-color:#ffffff;

}

#SEMINAR

{

    font:weight 800;

    text-transform:uppercase;

    font-family:sans-serif;

    background-color: #ffffff;

}

#SUB

{

    color:black;

    font-weight:uppercase;

    font-family:san-serif;

    background-color: #ffffff;

}

#SUB1

{

    background-color:#fff;

}

#SUB2

{

    color:black;

    text-transform: uppercase;

    background-color: #ffffff;

}

#SUB3

{

    font-weight:800;

    font-family: sans-serif;

    background-color: #ffffff;

}

#box1

{

    font-weight:800;

    font-family: sans-serif;

    color:cornflowerblue;

}

#box2

{

    font-weight:800;

    font-family: sans-serif;

    color:darkorange;

}

#box3

{

    font-weight:800;

    font-family: sans-serif;

    color:darkviolet;

}

#box4

{

    font-weight:800;

    font-family: sans-serif;

    color:green;

}

#box5

{

    font-weight:800;

    font-family: sans-serif;

    color:red;

}

#box6

{

    font-weight:800;

    font-family: sans-serif;

    color:hotpink;

}

#box7

{

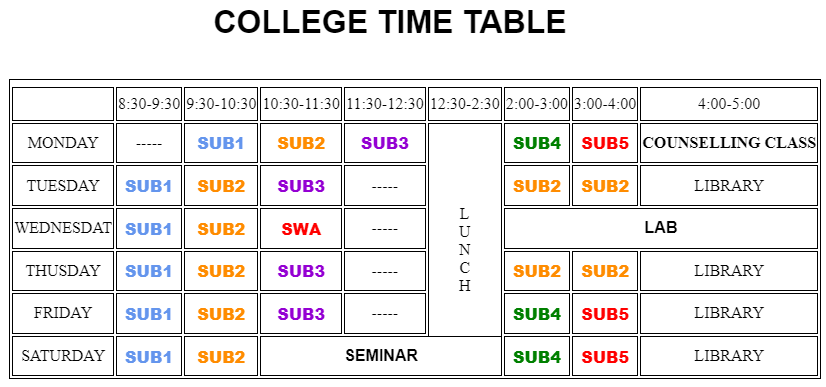
    font-weight:800;

    font-family: sans-serif;

    color:blue;

}

**OUTPUT:**

****

**PART B**

/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*/

**PROGRAM:1 DATE:29-02-2024**

**NAME: REG NO:U05DP22S0**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/Aim: Create a web page using HTML5 canvas element to show a clock which changes time for every second, minute and hours (as that of an analog clock). Clock should have second, minute and hour needles and minute marking must be there (as shown in screen shot).**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**<!DOCTYPE html>

<html>

    <head>

        <style>

            canvas

            {

                background-color: white;

            }

        </style>

    </head>

            <body>

                <canvas id="canvas" width="150" height="150">The Current Time</canvas>

                <script>

                    function clock()

                    {

                        const now=new Date();

                        const canvas=document.getElementById("canvas");

                        const ctx=canvas.getContext("2d");

                        ctx.save();

                        ctx.clearRect(0,0,150,150);

                        ctx.translate(75,75);

                        ctx.scale(0.4,0.4);

                        ctx.rotate(-Math.PI/2);

                        ctx.strokeStyle="black"

                        ctx.fillStyle="white";

                        ctx.lineWidth=8;

                        ctx.lineCap="round";

                        //Hours marks

                        ctx.save();

                        for(let i=0;i<12;i++)

                        {

                            ctx.beginPath();

                            ctx.rotate(Math.PI/6);

                            ctx.moveTo(100,0);

                            ctx.lineTo(120,0);

                            ctx.stroke();

                        }

                        ctx.restore();

                        //Minute marks

                        ctx.save();

                        ctx.lineWidth=5;

                        for(let i=0;i<60;i++)

                        {

                            if(i%5!==0)

                            {

                                ctx.beginPath();

                                ctx.moveTo(117,0);

                                ctx.lineTo(120,0);

                                ctx.stroke();

                            }

                            ctx.rotate(Math.PI/30);

                        }

                        ctx.restore();

                        const sec=now.getSeconds();

                        const min=now.getMinutes();

                        const hr=now.getHours()%12;

                        ctx.fillStyle="black";

                        //Write image description on

                        canvas.innerText='The Time is:${hr}:${min}';

                        //Write Hours

                        ctx.save();

                        ctx.rotate((Math.PI/6)\*hr+(Math.PI/360)\*min+(Math.PI/21600)\*sec);

                        ctx.lineWidth=14;

                        ctx.beginPath()

                        ctx.moveTo(-20,0);

                        ctx.lineTo(80,0);

                        ctx.stroke();

                        ctx.restore();

                        //Write Minutes

                        ctx.save();

                        ctx.rotate((Math.PI/30)\*min+(Math.PI/1800)\*sec);

                        ctx.lineWidth=10;

                        ctx.beginPath()

                        ctx.moveTo(-28,0);

                        ctx.lineTo(112,0);

                        ctx.stroke();

                        ctx.restore();

                         //Write seconds

                         ctx.save();

                        ctx.rotate((sec\*Math.PI)/30);

                        ctx.strokeStyle="red";

                        ctx.fillStyle="red";

                        ctx.lineWidth=6;

                        ctx.beginPath()

                        ctx.moveTo(-30,0);

                        ctx.lineTo(83,0);

                        ctx.stroke();

                        ctx.beginPath();

                        ctx.arc(0,0,10,0,Math.PI\*2,true);

                        ctx.fill();

                        ctx.beginPath();

                        ctx.arc(95,0,10,0,Math.PI\*2,true);

                        ctx.stroke();

                        ctx.fillStyle="rgba(0,0,0,0)";

                        ctx.arc(0,0,3,0,Math.PI\*2,true);

                        ctx.fill();

                        ctx.restore();

                        ctx.beginPath();

                        ctx.lineWidth=14;

                        ctx.strokeStyle="#325FA2";

                        ctx.arc(0,0,142,0,Math.PI\*2,true);

                        ctx.stroke();

                        ctx.restore();

                        window.requestAnimationFrame(clock);

                    }

                    window.requestAnimationFrame(clock);

                </script>

            </body>

</html>

**OUTPUT:**



/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*/

**PROGRAM:2 DATE-1-02-2024**

**NAME: REG NO:U05DP22S0**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/Aim: Create a web page containing simple calculator which should have basic arithmetic (+,-,\*,/ ) operation on two floating point numbers and show result.**

**Validations to be followed:**

**• . (Decimal point) should be taken only once for an operand.**

**• Operand can be negative.**

**• Division by zero must be shown proper error message in result.**

**Sample screen shot:**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

<!DOCTYPE html>

<html>

    <head>

        <title>Simple Calculator using HTML,CSS and JavaScript</title>

        <link rel="stylesheet" href="stylesheet.css">

    </head>

    <body>

        <table class="calculator">

            <tr>

                <td colspan="3"><input class="display-box" type="text" id="result" disabled/></td>

                <!--clearScreen() function clears all the values-->

                <td><input type="button" value="c" onclick="clearScreen()" id="btn" /> </td>

            </tr>

            <tr>

                <!--display() function display the value of clicked button-->

                <td><input type="button" value="1" onclick="display('1')" /> </td>

                <td><input type="button" value="2" onclick="display('2')" /> </td>

                <td><input type="button" value="3" onclick="display('3')" /> </td>

                <td><input type="button" value="/" onclick="display('/')" /> </td>

            </tr>

            <tr>

                <td><input type="button" value="4" onclick="display('4')" /> </td>

                <td><input type="button" value="5" onclick="display('5')" /> </td>

                <td><input type="button" value="6" onclick="display('6')" /> </td>

                <td><input type="button" value="-" onclick="display('-')" /> </td>

            </tr>

            <tr>

                <td><input type="button" value="7" onclick="display('7')" /> </td>

                <td><input type="button" value="8" onclick="display('8')" /> </td>

                <td><input type="button" value="9" onclick="display('9')" /> </td>

                <td><input type="button" value="+" onclick="display('+')" /> </td>

            </tr>

            <tr>

                <td><input type="button" value="." onclick="display('.')" /> </td>

                <td><input type="button" value="0" onclick="display('0')" /> </td>

                <!--calculate() function evaluates the mathematical expression-->

                <td><input type="button" value="=" onclick="calculate('=')" id="btn" /> </td>

                <td><input type="button" value="\*" onclick="display('\*')" /> </td>

            </tr>

        </table>

        <script type="text/JavaScript" src="script.js"></script>

    </body>

</html>

**Script.js**

//This function clear all the values

function clearScreen()

{

     document.getElementById("result").value="";

}

//This function display values

function display(value)

{

     document.getElementById("result").value+=value;

}

//This function evaluates the expression and returns result

function calculate()

{

    var p=document.getElementById("result").value;

    var q=eval(p);

    document.getElementById("result").value=q;

}

**Style.css**

.calculator

{

      padding: 10px;

      border-radius: 1em;

      height: 380px;

      width: 400px;

      margin: auto;

      background-color: #191b28;

      box-shadow: rgba(0,0,0,0.19) 0px 10px 20px,rgba(0,0,0,0.23) 0px 6px 6px ;

}

.display-box

{

    font-family: 'Orbitron', sans-serif;

    background-color: #dcdbe1;

    border: solid black 0.5px;

    color: black;

    border-radius: 5px;

    width: 100%;

    height: 65%;

}

#btn

{

    background-color: #fb0066;

}

input[type=button]

{

    font-family: 'Orbitron', sans-serif;

    background-color: #64278f;

    color: white;

    border: solid black 0.5px;

    width: 100%;

    border-radius: 5px;

    height: 70%;

    outline: none;

}

input:active[type=button]

{

    background: #e5e5e5;

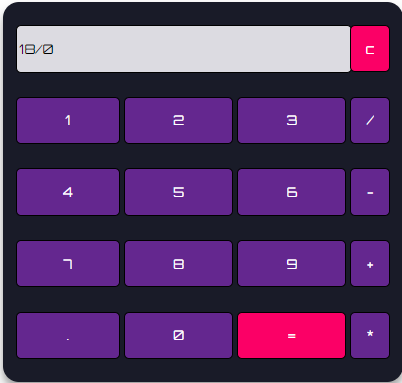
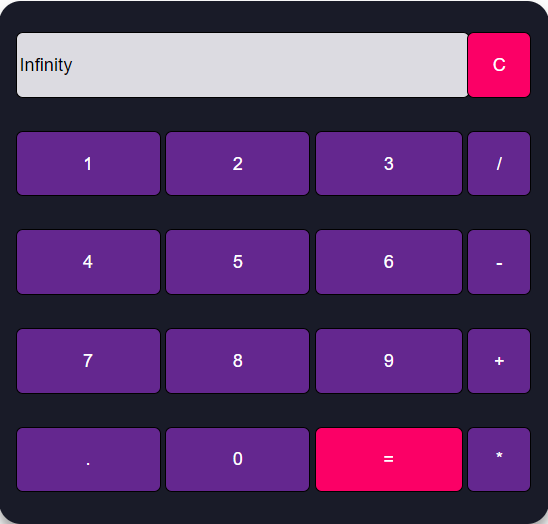
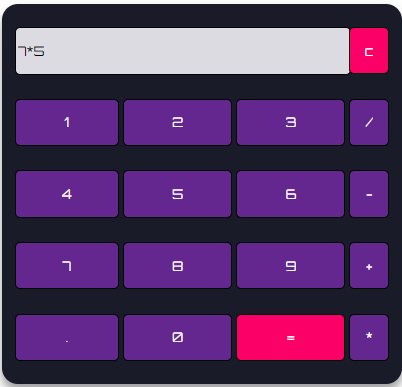
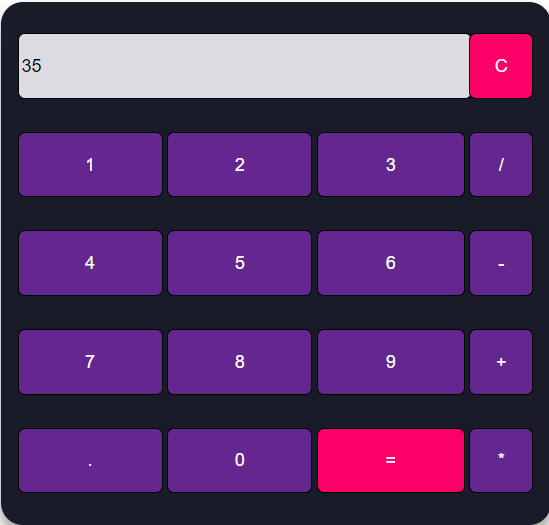
    -webkit-box-shadow: inset 0px 0px 5px #c1c1c1;

    -moz-box-shadow: inset 0px 0px 5px #c1c1c1;

    box-shadow: inset 0px 0px 5px #c1c1c1;

}

**OUTPUT:**

/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*/

**PROGRAM:3 DATE:18-04-2024**

**NAME: REG NO:U05DP22S0**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/Aim:** **Create a HTML page make a quiz game where user should answer one question at a time, answers must be shown in radio buttons. Without submitting the answer, quiz should not move to next question (Minimum five questions must be there). When user wishes to get score (using score button) score should be displayed in alert 22 message. All the question must be loaded in same page (no page navigation is allowed) Sample screen shot:**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**<!DOCTYPE html>

<html>

    <head>

        <title>QUIZ</title>

        <style>

            \*{

                box-sizing: border-box;

            }

            .quiz-header

            {

                padding: 2px;

                border-radius: 8px;

                background-color: white;

            }

            h2

            {

                padding: 1px;

                text-align: center;

                margin: 0;

            }

            body

            {

                background-color: #b8c6db;

                display: flex;

                align-items: center;

                justify-content: center;

                height: 100vh;

                margin: 0;

            }

            .quiz-container

            {

                background-color: #fff;

                border-radius: 100px;

                width: 500px;

                max-width: 95px;

            }

            ul

            {

                list-style-type: none;

                padding: 0;

            }

            ul li

            {

                font-size: 1.2rem;

                margin: 1rem 0;

            }

            ul li label

            {

                cursor: pointer;

            }

            button

            {

                background-color: #7b339b;

                color: #fff;

                border: none;

                display: block;

                width: 100%;

                cursor: pointer;

                font-size: 1.1rem;

                font-family: inherit;

                padding: 1.1rem;

            }

            button:hover

            {

                background-color: #732d91;

            }

            button:focus

            {

                outline: none;

                background-color: #5e3370;

            }

        </style>

    </head>

    <body>

        <section>

            <div class="quiz-container" id="quiz"></div>

            <div class="quiz-header">

                <h2 id="question">Question is loading...</h2>

                <ul>

                    <li>

                        <input type="radio" name="answer" id="a" class="answer" />

                        <label for="a" id="a\_text">Answer...</label>

                    </li>

                    <li>

                        <input type="radio" name="answer" id="b" class="answer" />

                        <label for="a" id="b\_text">Answer...</label>

                    </li>

                    <li>

                        <input type="radio" name="answer" id="c" class="answer" />

                        <label for="a" id="c\_text">Answer...</label>

                    </li>

                    <li>

                        <input type="radio" name="answer" id="d" class="answer" />

                        <label for="a" id="d\_text">Answer...</label>

                    </li>

                </ul>

                <button id="submit">Submit</button>

                <br>

                <button id="score" onclick="scorecheck()">Score</button>

            </div>

        </section>

        <script>

            const quizData=

            [

            {

                question: "1.Which language runs in a web browser?",

                a:"Java",

                b:"C",

                c:"Python",

                d:"Javascript",

                correct:"d",

            },

            {

                question: "2.What does CSS stand for?",

                a:"Central Style Sheets",

                b:"Cascading Style Sheets",

                c:"Cascading Simple Sheets",

                d:"Cars SUVs Sailboats",

                correct:"b",

            },

            {

                question: "3.What does HTML stand for?",

                a:"Hypertext Markup Language",

                b:"Hypertext Markdown Language",

                c:"Hyperloop Machine Language",

                d:"Helicopters Terminals Motorboats Lamborginis",

                correct:"a",

            },

            {

                question: "4.What yera was Javascript launched?",

                a:"1996",

                b:"1995",

                c:"1994",

                d:"none of the above",

                correct:"b",

            },

            {

                question: "5. <br> What type of tag is this?",

                a:"Break tag",

                b:"Broken one",

                c:"An opening tag",

                d:"A closing tag",

                correct:"a",

            }];

            const quiz=document.getElementById("quiz");

            const answerElements=document.querySelectorAll(".answer");

            const questionElement=document.getElementById("question");

            const a\_text=document.getElementById("a\_text");

            const b\_text=document.getElementById("b\_text");

            const c\_text=document.getElementById("c\_text");

            const d\_text=document.getElementById("d\_text");

            const submitButton=document.getElementById("submit");

            let currentQuiz=0;

            let score=0;

            const deselectAnswers=()=>

            {

                answerElements.forEach((answer)=> (answer.checked=false));

            };

            const getSelected=()=>

            {

                let answer;

                answerElements.forEach((answerElements)=>

                {

                    if (answerElements.checked)answer=answerElements.id;

                });

                return answer;

            };

                const loadQuiz=()=>

                {

                    deselectAnswers();

                    const currentQuizData=quizData[currentQuiz];

                    questionElement.innerText=currentQuizData.question;

                    a\_text.innerText=currentQuizData.a;

                    b\_text.innerText=currentQuizData.b;

                    c\_text.innerText=currentQuizData.c;

                    d\_text.innerText=currentQuizData.d;

                };

                function scorecheck()

                {

                    alert(score);

                }

                loadQuiz();

                submitButton.addEventListener("click",()=>

                {

                    const answer=getSelected();

                    if (answer)

                    {

                        if (answer===quizData[currentQuiz].correct)score++;

                            currentQuiz++;

                        if (currentQuiz<quizData.length)

                            loadQuiz();

                        else

                        {

                            quiz.innerHTML=`<h2>You answered ${score}questions correctly</h2>

                            <button onclick="history.go(0)">PlayAgain </button>`

                        }

                    }

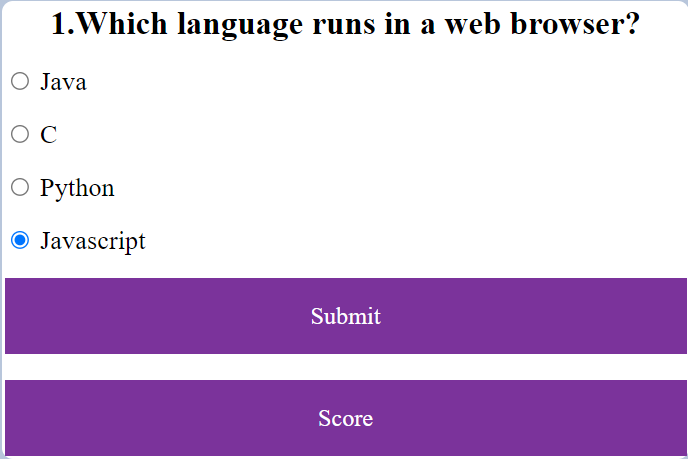
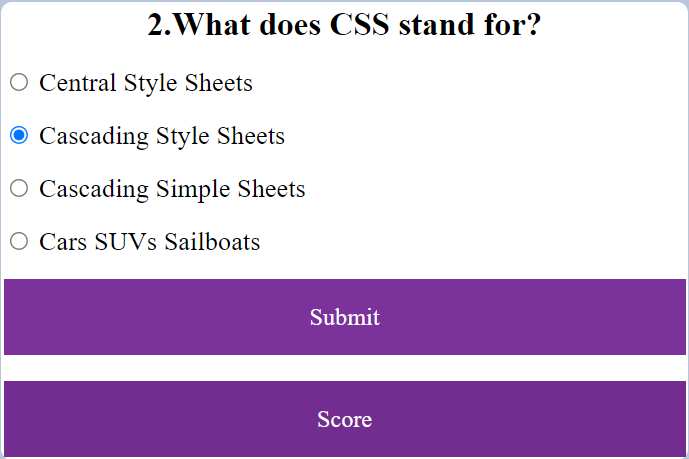
                });

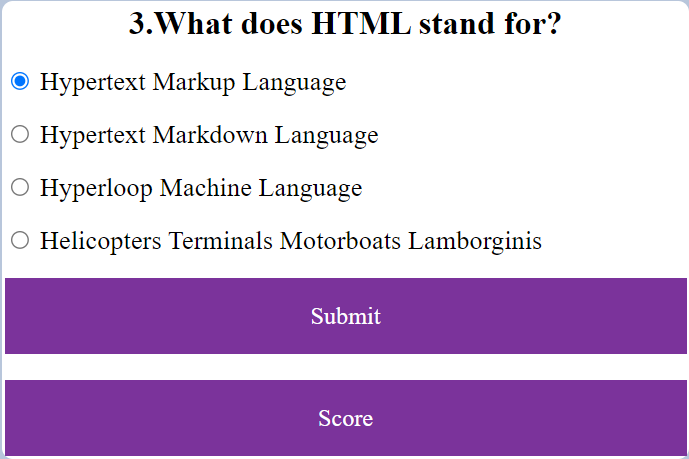
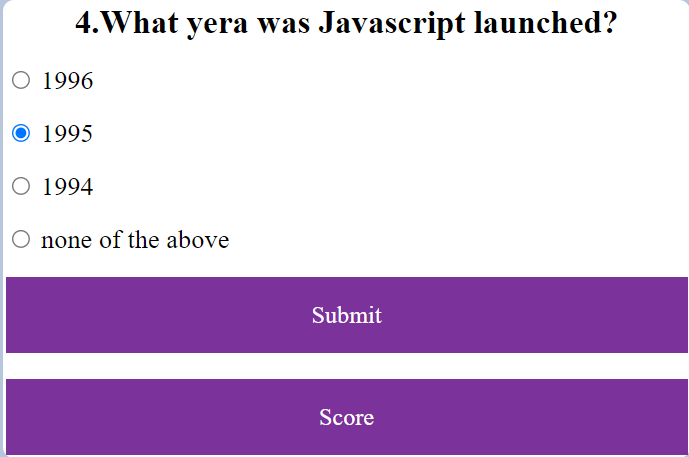
        </script>

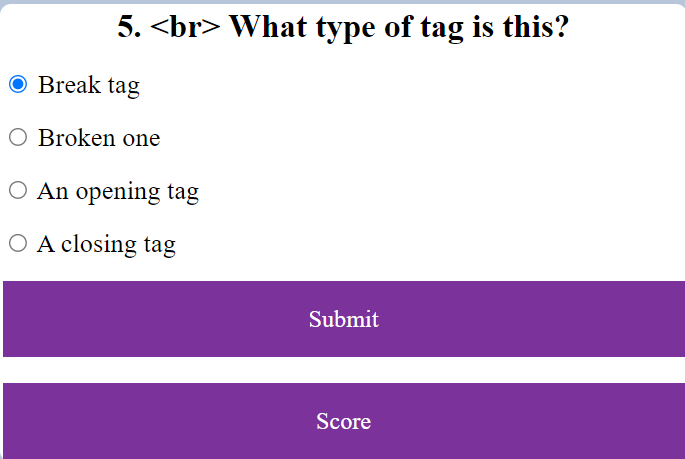
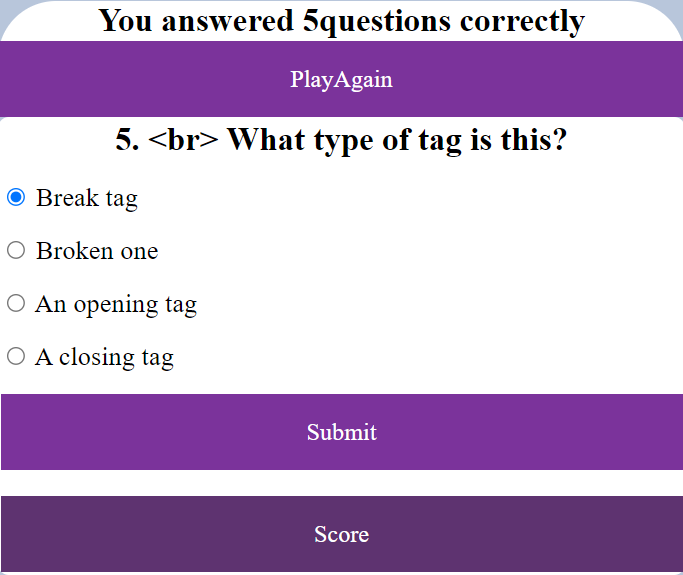
    </body>

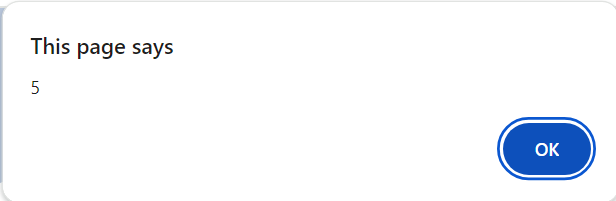
</html>

**OUTPUT:**



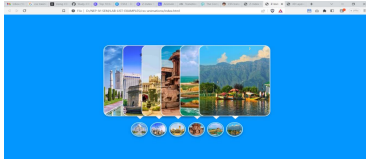
/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*/

**PROGRAM:4 DATE:09-05-2024**

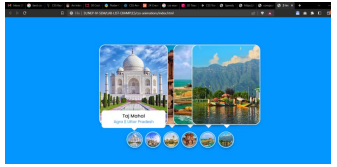
**NAME: REG NO:U05DP22S0**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/Aim: Create a web page using HTML/CSS which contains cards (shown as a stack of cards) with image of a tourist place and below that is a thumbnail (shown in circle with image). When mouse hovers over thumbnail, corresponding card comes in front and also small description about the tourist place will be displayed. Use ONLY CSS animation and transition.**

**Initial interface:**

****

**Interface should look like below screenshot when mouse hovered on thumbnail:**

****

**(Java script should not be used to animate.)**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

<!DOCTYPE html>

  <head>

    <title>  Hover Animation </title>

    <link rel="stylesheet" href="style.css">

   </head>

<body>

  <div class="container">

    <div class="icon-image">

          <div class="icon">

            <img src="TajMahal.jpg" alt="">

          </div>

          <div class="hover-image">

                <div class="img">

                <img src="TajMahal.jpg" alt="">

                </div>

                <div class="content">

                <div class="details">

                <div class="name">Taj Mahal</div>

                <div class="job"> Agra || Uttar Pradesh</div>

                </div>

                </div>

        </div>

    </div>

  <div class="icon-image">

          <div class="icon">

            <img src="hampi.jpg" alt="">

          </div>

        <div class="hover-image">

          <div class="img">

            <img src="hampi.jpg" alt="">

          </div>

        <div class="content">

          <div class="details">

            <div class="name">Hampi</div>

            <div class="job">Ballari || Karnataka</div>

  </div>

        </div>

        </div>

    </div>

<div class="icon-image">

          <div class="icon">

            <img src="dallake.jpg" alt="">

          </div>

        <div class="hover-image">

          <div class="img">

            <img src="dallake.jpg" alt="">

          </div>

        <div class="content">

          <div class="details">

            <div class="name">Daal Lake</div>

            <div class="job">Kashmir || Kashmir</div>

          </div>

        </div>

        </div>

    </div>

  </div>

</body>

</html>

**Style.css**

\*{

    box-sizing: border-box;

    font-family: 'Poppins',sans-serif;

  }

  body{

    height: 100vh;

    width: 100%;

    display: flex;

    justify-content: center;

    align-items: center;

    background: #0396FF;

  }

  .container{

    height: 500px;

    display: flex;

    min-width: 400px;

    align-items: flex-end;

   }

  .icon-image{

    position: relative;

    height: 70px;

    width: 70px;

    cursor: pointer;

    border-radius: 50%;

    background: #fff;

  }

  .icon-image .icon img{

    position: absolute;

    height: 95%;

    width: 95%;

    left: 50%;

    top: 50%;

    transform: translate(-50%, -50%);

    object-fit: cover;

    border-radius: 50%;

    border: 3px solid #0396FF;

  }

  .icon-image .hover-image{

    position: absolute;

    height: 350px;

    width: 300px;

    bottom: 100px;

    left: 50%;

    transform: translateX(-50%);

   }

  .icon-image:hover .hover-image{

    left: -200px;

    z-index: 12;

    transform: translateX(80px);

    transition: left 0.5s ease, z-index 0s, transform 0.5s ease;

    transition-delay: 0s, 0.5s, 0.5s;

  }

  .hover-image img{

    position: absolute;

    height: 100%;

    width: 100%;

    object-fit: cover;

    border: 3px solid #fff;

    border-radius: 25px;

  }

  .hover-image .content{

    position: absolute;

    width: 100%;

    bottom: -10px;

  padding: 0 10px;

  }

  .content::before{

  content: '';

  position: absolute;

  height: 20px;

  width: 20px;

  background: #fff;

  left: 50%;

  bottom: -7px;

  transform: rotate(45deg) translateX(-50%);

  z-index: -1;

  }

  .content .details{

    position: relative;

    background: #fff;

    padding: 10px;

    border-radius: 12px;

    text-align: center;

    opacity: 0;

    }

  .icon-image:hover .details{

    transition: all 0.5s ease;

    transition-delay: 0.9s;

    opacity: 1;

  }.content .details .name{

   font-size: 20px;

   font-weight: 500;

  }

  .content .details .job{

   font-size: 17px;

   color: #0396FF;

  }

**OUTPUT:**

** **

/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*/

**PROGRAM:5 DATE:16-05-2024**

**NAME: REG NO:U05DP22S0**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/Aim:** **Create a web page using HTML5/CSS3 to animate a truck movement. While truck moves on mountains and trees should move in the back ground.**

**Background hills must be created using CSS only and for tree, truck and wheels download the images from the following URLs.**

[**https://s3-us-west-2.amazonaws.com/s.cdpn.io/130015/tree.svg**](https://s3-us-west-2.amazonaws.com/s.cdpn.io/130015/tree.svg)

[**https://s3-us-west-2.amazonaws.com/s.cdpn.io/130015/truck.svg**](https://s3-us-west-2.amazonaws.com/s.cdpn.io/130015/truck.svg)

[**https://s3-us-west-2.amazonaws.com/s.cdpn.io/130015/wheels.svg**](https://s3-us-west-2.amazonaws.com/s.cdpn.io/130015/wheels.svg)

**Animation must be implemented using ONLY CSS and Java script should not be used.**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/** <!DOCTYPE html>

<head>

<title>Speedy Truck</title>

<link rel="stylesheet" href="speedytruck.css">

</head>

<body>

<div class="loop-wrapper">

  <div class="tree"></div>

  <div class="truck"></div>

  <div class="wheels"></div>

</div>

</body>

</html

**speedytruck.css**

body {

  background: #009688;

  }

.loop-wrapper {

  margin: 0 auto;

  position: relative;

  width: 600px;

  height: 250px;

  overflow: hidden;

  border-bottom: 3px solid #fff;

  }

.tree{

  position: absolute;

  height: 100px;

  width: 35px;

  bottom: 0;

  background: url(tree.svg) no-repeat;

}

.truck, .wheels {

  width: 85px;

  bottom: 0px;

  right: 50%;

  position: absolute;

  }

.truck {

  background: url(truck.svg) no-repeat;

   height: 60px;

}

.truck:before {

  content: " ";

  position: absolute;

  width: 25px;

  box-shadow:

    -30px 28px 0 1.5px #fff,

     -35px 18px 0 1.5px #fff;

}

.wheels {

  background: url(wheels.svg) no-repeat;

  height: 15px;

}

.tree  { animation: tree 3s 0.000s linear infinite; }

@keyframes tree {

  0%   { transform: translate(1350px); }

  50% {}

  100% { transform: translate(-50px); }

}

**tree.svg**

<svg xmlns="http://www.w3.org/2000/svg" width="32" height="100" viewBox="0 0 32 100">

  <path fill="#FFF" d="M31.945 74.986L17.37 1.148A1.416 1.416 0 0 0 15.988 0c-.673 0-1.252.48-1.383 1.148L.027 74.986c-.083.42.025.854.292 1.186.268.332.669.523 1.091.523h13.167V100h2.821V76.695h13.165c.422 0 .821-.191 1.09-.523.27-.331.375-.766.292-1.186z"/>

</svg>

**truck.svg**

<svg xmlns="http://www.w3.org/2000/svg" width="85" height="60" viewBox="0 0 85 60">

  <path fill="#FFF" d="M5.138 54.039a3.77 3.77 0 0 1-.149-.005l-.859.002A4.134 4.134 0 0 1 0 49.906V5.195a4.135 4.135 0 0 1 4.13-4.133h46.973c2.272 0 4.123 1.95 4.123 4.229v44.612a4.133 4.133 0 0 1-4.127 4.131H29.962c-1.091-.019-3.239-.691-3.727-3.128-1.067-3.957-4.755-6.789-8.947-6.789-4.291 0-8.098 3.041-9.051 7.229-.225 1.817-1.723 2.693-3.099 2.693zM4.127 4.208c-.596 0-1.083.389-1.083.987v44.709c0 .597.488 1.086 1.086 1.086h1.004c.005-.047.123-.271.133-.317 1.267-5.562 6.323-9.597 12.022-9.597a12.356 12.356 0 0 1 11.912 9.137c.151.734.681.777.785.777h21.111c.596 0 1.083-.487 1.083-1.084V5.293c0-.598-.485-1.085-1.083-1.085H4.127zM84.929 35.828s-.093-2.093-.288-3.118c-.164-.873-1.087-2.644-1.087-2.644l-7.299-13.59c-.951-1.52-3.115-2.707-4.558-2.707H60.785a2.608 2.608 0 0 0-2.606 2.609v33.526a2.609 2.609 0 0 0 2.606 2.609h.643s.949-.123 1.304-1.312c.986-3.933 4.514-6.862 8.749-6.862 4.145 0 7.612 2.808 8.682 6.613.442 1.612 2.231 1.561 2.231 1.561A2.608 2.608 0 0 0 85 49.904l-.071-14.076zm-6.603-3.511H65.312a1.996 1.996 0 0 1-1.989-1.99V20.143c0-1.098.894-1.99 1.989-1.99h4.365c2.483 0 4.117 2.009 4.63 2.978l5.065 9.434c.521.962.053 1.752-1.046 1.752z"/>

  <path fill="#009688" d="M4.127 4.208c-.596 0-1.083.389-1.083.987v44.709c0 .597.488 1.086 1.086 1.086h1.004c.005-.047.123-.271.133-.317 1.267-5.562 6.323-9.597 12.022-9.597a12.356 12.356 0 0 1 11.912 9.137c.151.734.681.777.785.777h21.111c.596 0 1.083-.487 1.083-1.084V5.293c0-.598-.485-1.085-1.083-1.085H4.127z"/>

</svg>

**wheels.svg**

<svg xmlns="http://www.w3.org/2000/svg" width="85" height="15" viewBox="0 0 85 15">

  <circle fill="#FFF" cx="17.289" cy="8.413" r="6.587"/>

  <circle fill="#FFF" cx="71.48" cy="8.412" r="6.586"/>

</svg>

**OUTPUT:**



/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*/

**PROGRAM:6 DATE:25-04-2024**

**NAME: REG NO:U05DP22S0**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/Aim:** **Create a simple paint app which draws lines based on the selected colour (chosen using color input) with selected thickness (chosen using number input) and there must be CLEAR button to clear the canvas. Sample screen shot:**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**<html lang="en">

    <head>

        <link rel="stylesheet" href="Paint.css">

        <title>Drawing app</title>

    </head>

    <body>

        <section class="container">

            <div id="tollbar">

                <h1>Draw</h1>

                <label="stroke">Stroke</label>

                <input id="stroke" name='stroke'type="color">

                <label="lineWidth">Line width</label>

                <input id="lineWidth" name='lineWidth' type="number" value="5">

                <button id="clear">Clear</button>

            </div>

            <div class="drawing-board">

                <canvas id="drawing-board"></canvas>

            </div>

        </section>

        <script src="Paint.js"></script>

    </body>

</html>

**Paint.CSS**

body

{

    margin: 0;

    padding: 0;

    height: 100%;

    overflow: hidden;

    color: white;

}

h1

{

    background: #7f7fd5;

    background: -webkit-linear-gradient(to right,#91EAE4,#86A8E7);

    background-clip: text;

    -webkit-background-clip: text;

    -webkit-text-fill-color: transparent;

}

.container

{

    height: 100%;

    display: flex;

}

#toolbar

{

    display: flex;

    flex-direction: column;

    padding: 5px;

    width: 70px;

    background-color: #202020;

}

#toolbar \*

{

    margin-bottom: 6px;

}

#toolbar label

{

    font-size: 12px;

}

#toolbar input

{

    width: 100%;

}

#toolbar button

{

    background-color: #1565c0;

    border: none;

    border-radius: 4px;

    color: white;

    padding: 2px;

}

**Paint.js**

const canvas=document.getElementById('drawing-board');

const toolbar=document.getElementById('toolbar');

const ctx=canvas.getContext('2d');

const canvasoffsetX=canvas.offsetLeft;

const canvasoffsetY=canvas.offsetTop;

canvas.width=window.innerWidth-canvasoffsetX;

canvas.height=window.innerHeight-canvasoffsetY;

let isPainting=false;

let lineWidth=5;

let startX;

let startY;

toolbar.addEventListener('click',e=>{

    if(e.target.id==='clear')

    {

        ctx.clearRect(0,0,canvas.width,canvas.height);

    }

});

toolbar.addEventListener('change',e=>{

    if(e.target.id==='stroke')

    {

        ctx.strokeStyle=e.target.value;

    }

    if(e.target.id==='lineWidth')

    {

       lineWidth=e.target.value;

    }

});

const draw=(e)=>{

    if(!isPainting)

    {

        return;

    }

    ctx.lineWidth=lineWidth;

    ctx.lineCap='round';

    ctx.lineTo(e.clientX-canvasoffsetX,e.clientY);

    ctx.stroke();

}

canvas.addEventListener('mousedown',(e)=>{

    isPainting=true;

    startX=e.clientX;

    startY=e.clientY;

});

canvas.addEventListener('mouseup',e=>{

    isPainting=false;

    ctx.stroke();

    ctx.beginPath();

});

canvas.addEventListener('mousemove',draw);

**OUTPUT:**

****

/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*/

**PROGRAM:7 DATE:25-04-2024**

**NAME: REG NO:U05DP22S0**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/Aim:** **Create web page using HTML5 canvas element to illustrate all canvas composition. Output must exactly look like the following screenshot:**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**<!DOCTYPE HTML>

<html>

    <head>

        <script type="text/javascript">

            var compositeTypes=

            [

                'source-over','source-in','source-out','source-atop',

                'destination-over','destination-in','destination-out','destination-atop',

                'lighter','darker','copy','xor'

            ];

            function drawShape()

            {

                for(i=0;i<compositeTypes.length;i++)

                {

                    var label=document.createTextNode(compositeTypes[i]);

                    document.getElementById('lab'+i).appendChild(label);

                    var ctx=document.getElementById('tut'+i).getContext('2d');

                    //draw rectangle

                    ctx.fillStyle="#ff3366";

                    ctx.fillRect(15,15,70,70);

                    //set composite properly

                    ctx.globalCompositeOperation=compositeTypes[i];

                    //draw circle

                    ctx.fillStyle="#0066ff";

                    ctx.beginPath();

                    ctx.arc(75,75,35,0,Math.PI\*2,true);

                    ctx.fill();

                }

            }

        </script>

    </head>

    <body onload="drawShape();">

        <table border="1" align="center">

            <tr><td>

                    <canvas id="tut0" width="125" height="125"></canvas><br/>

                    <label id="lab0"></label>

                </td>

                <td>

                    <canvas id="tut1" width="125" height="125"></canvas><br/>

                    <label id="lab1"></label>

                </td>

                <td>

                    <canvas id="tut2" width="125" height="125"></canvas><br/>

                    <label id="lab2"></label>

                </td>

            </tr>

 <tr><td>

                    <canvas id="tut3" width="125" height="125"></canvas><br/>

                    <label id="lab3"></label>

                </td>

                <td>

                    <canvas id="tut4" width="125" height="125"></canvas><br/>

                    <label id="lab4"></label>

                </td>

                <td>

                    <canvas id="tut5" width="125" height="125"></canvas><br/>

                    <label id="lab5"></label>

                </td>

            </tr>

            <tr> <td>

                    <canvas id="tut6" width="125" height="125"></canvas><br/>

                    <label id="lab6"></label>

                </td>

                <td>

                    <canvas id="tut7" width="125" height="125"></canvas><br/>

                    <label id="lab7"></label>

                </td>

                <td>

                    <canvas id="tut8" width="125" height="125"></canvas><br/>

                    <label id="lab8"></label>

                </td>

            </tr>

            <tr> <td>

                    <canvas id="tut9" width="125" height="125"></canvas><br/>

                    <label id="lab9"></label>

                </td>

                <td>

                    <canvas id="tut10" width="125" height="125"></canvas><br/>

                    <label id="lab10"></label>

                </td>

                <td>

                    <canvas id="tut11" width="125" height="125"></canvas><br/>

                    <label id="lab11"></label>

                </td>

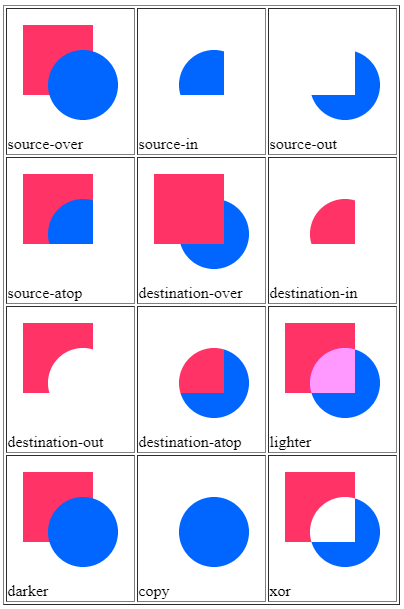
            </tr>

        </table>

    </body>

</html>

**OUTPUT:**

****

/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*/

**PROGRAM:8 DATE:23-05-2024**

**NAME: REG NO:U05DP22S0**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/Aim: Create a web page which must be as shown in below image using HTML5, SVG and CSS3. Here Mountain, trees and clouds must be drawn using SVG, Clouds must have bounce animation (css animation), and stars in sky changes their position randomly for every time page is loaded (java script can be used). Sky and stars must be created using element.**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

<!DOCTYPE html>

<head>

<title> SVG SCENE</title>

<link rel="stylesheet" type="text/css" href="sky.css"/>

<script>

window.onload = function()

{

var sky = document.getElementById("sky");

sky.width = document.body.clientWidth;

sky.height = document.body.clientHeight;

if (sky.getContext){

    var skyContext = sky.getContext("2d");

    var radius = 2;

    for(var star = 0; star < 50; star++){

        var min = ( Math.random() \* 30 + 5 ) / 10;

        var max = sky.width - radius;

        var centerX = Math.floor(Math.random() \* (max - min + 1)) + min;

        var centerY = Math.floor(Math.random() \* (max - min + 1)) + min;

        skyContext.beginPath();

        skyContext.arc(centerX, centerY, min, 0, 2 \* Math.PI);

        skyContext.fillStyle = "rgb(255, 255, 255)";

        skyContext.fill();

    }

}

}

</script>

</head>

<body>

<section class="stage">

    <svg height="390" width="550" id="mountains">

        <polygon points="300,390 190,90 320,130 400,340" fill="#5d2042" />

        <polygon points="0,340 108,190 194,100 201,120 301,390" fill="#320e40" />

        <polygon points="14,348 117,174 194,102 172,377" fill="#3b1642" fill-opacity="0.8" />

        <polygon points="120,174 194,102 233,206 144,275" fill="#3d1744" fill-opacity="0.9" />

        <polygon points="233,206 288,177 324,214" fill="#421943" />

        <polygon points="233,206 324,214 247,245" fill="#3e1743" />

        <polygon points="247,245 324,214 360,360" fill="#411842" />

        <polygon points="324,214 288,177 350,210" fill="#632242" />

        <polygon points="324,214 350,210 360,360" fill="#652343" />

        <g id="apex">

            <polygon points="108,190 170,40 194,100" fill="#aeacb9" />

            <polygon points="170,40 234,6 260,70 288,178 194,102" fill="#ceced8" />

            <polygon points="234,6 290,80 320,132 288,178" fill="#ffffed" />

        </g>

    </svg>

    <svg id="ground"></svg>

    <svg id="hills" width="700" height="170">

        <polygon points="480,70 530,100 560,90 516,40" fill="#9b9d57" />

        <polygon points="480,70 530,100 412,84" fill="#7d8f57" />

        <polygon points="530,100 412,84 360,138" fill="#748857" />

        <polygon points="360,138 240,140 320,82" fill="#748857" />

        <polygon points="412,84 360,140 320,82" fill="#88945a" />

        <polygon points="320,82 240,140 210,64" fill="#597252" />

        <polygon points="300,78 100,100 0,104 170,58" fill="#4f654f" />

        <polygon points="172,58 145,40 122,48 66,79 0,104" fill="#536a50" />

    </svg>

    <canvas id="sky"></canvas>

</section>

</body>

</html>

**sky.css**

html, body {

height: 100%;

width: 100%

}

 body {

min-height: 100%;

background: linear-gradient(to bottom, #0a1a27, #4e83b7);

position: relative;

}

body #mountains {

z-index: 2;

position: absolute;

bottom: 20%;

margin-bottom: -16px;

left: 10%;

}

 body #ground {

z-index: 1;

width: 100%;

height: 20%;

position: absolute;

bottom: 0;

background: #879759;

background: linear-gradient(to bottom, #879759, #648459);

}

 body #hills {

//background: rgba(255, 0, 0, 0.3);

position: absolute;

left: 10%;

margin-left: -120px;

margin-bottom: -86px;

bottom: 20%;

z-index: 3;

}

 body #stars {

width: 100%;

height: 100%;

}

**OUTPUT:**

****