Government Engineering College, Rajkot Computer Engineering Department

Web Programming

(Subject Code –3160713)

# LAB

# MANUAL

**6th Semester Computer Engineering**

*YASH A. LATHIYA*

*CE\_K2*

*200200107095*

**Practical 1**

**Create an HTML page which displays your biodata. (Use various HTML elements like Headers, Images, Paragraph, Line Break, Image and List).**

**Index.html**

<html>

    <head>

        <title>yash' Resume</title>

    </head>

    <body>

        <div class = header>

            <div class = mainInfo>

                <img src="https://bsmedia.business-standard.com/\_media/bs/img/topic-profile/profile-images/thumb/463\_463/1556102794.png" height="150" width="150">

                <h1>Yash Lathiya</h1>

                <h3>Computer Engineering</h3>

                <h5>I'm student of computer engineering and learning programming languages as well as practicing front-end web

devlopment.</h5>

            </div>

            <div class = otherDetails>

                <h3><b>Email ID</b></h3>

                <h4>yash.a.lathiya@gmail.com</h4>

                <h3><b>Mobile number</b></h3>

                <h4>7046985354</h4>

                <h3><b>From</b></h3>

                <h4>Surat - 394101</h4>

                <h3><b>Birth Date</b></h3>

                <h4>22nd March, 2003</h4>

                <h3><b>Linked In</b></h3>

                <h4>linkedin.com/in/yashlathiya</h4>

            </div>

        </div>

        <div class = education>

            <h1><b>Education</b></h1>

            <h2>Bachelor of Engineering in COMPUTER ENGINEERING</h2>

            <h3>Government Engineering College</h3>

            <h5>Rajkot</h5>

            <h6><li>Current CPI : 9.28</li></h6>

        </div>

        <div class = workExperiences>

            <h1><b>Work Experiences</b></h1>

            <h2>Web Developer Intern</h2>

            <h3>at LetsGrowMore</h3>

            <h5>Remote Internship</h5>

            <h6><li>Awarded with (LOR)Letter of Recommendation</li></h6>

        </div>

        <div class = certificates>

            <h1><b>Certificates</b></h1>

            <h2>Fundamentals of Digital Marketing (03/2020)</h2>

            <h3><em>Google Digital Garage | Certificate ID :35Q WZL SZP</em></h3>

            <h2>Java Certification by HackerRank (06/2022 - Present)</h2>

            <h3><em>https://www.hackerrank.com/certificates/76d27c7a15e5</em></h3>

        </div>

        <div class = programmingLanguages>

            <h1><b>Programming Languages</b></h1>

            <h4>

            <li>C Programming</li>

            <li>C++</li>

            <li>Java</li>

            <li>HTML</li>

            <li>CSS</li>

            <li>JavaScript</li>

            </h4>

        </div>

        <div class = personalProjects>

            <h1><b>Personal projects</b></h1>

            <h2>Front-end Web Devlopment</h2>

            <h4>

                <li>Analog Clock Simulation</li>

                <li>Live Covid Tracker website</li>

                <li>Necessary templates in every website(eg. Login & SignUp)</li>

            </h4>

        </div>

        <div class = achievements>

            <h1><b>Achievements</b></h1>

            <h2>JEE(Mains) (2020)</h2>

            <h4><em>94 percentile</em></h4>

            <h2>5 Star (Golden Badge) in C++</h2>

            <h4><em>At HackerRank</em></h4>

            <h2>HackerRank Profile</h2>

            <h4><em>https://www.hackerrank.com/yashlathiya59pp1</em></h4>

        </div>

        <div class = Languages>

            <h1><b>Languages</b></h1>

            <h2>English</h2>

            <h4><em>Full Professional Proficiency</em></h4>

            <h2>Hindi</h2>

            <h4><em>Full Professional Proficiency</em></h4>

            <h2>Gujarati</h2>

            <h4><em>Native or Bilingual Proficiency</em></h4>

        </div>

        <div class = skillsInterests>

            <h1><b>Skills & Intrests</b></h1>

            <h4>Book Reading</h4>

            <h4>Public Speaking</h4>

        </div>

    </body>

</html>

**Practical 2**

**Create an HTML page which displays your last semester GTU result. Use Tables to generate the same result that you see in GTU website**

**Index.html**

<!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>GTU Grade History</title>

    <link rel="stylesheet" href="gtu-grade-history.css" />

    <script src="gtu-grade-history.js"></script>

  </head>

  <body>

    <div class="mainBox">

      <div class="heading">

        <div class="logo">

          <img

            src="img\_url.png”

            alt="image of logo"

          />

        </div>

        <div class="info">

          <div class="gtu">GUJARAT TECHNOLOGICAL UNIVERSITY</div>

          <div class="sgh">STUDENT GRADE HISTORY</div>

        </div>

      </div>

      <div class="iopanel">

        <div class="first">

          <!-- <div class="input"> -->

          <label for="enrollment" id="enrollmentInput"

            >Enrollment No :<input type="text" id="enrollment"

          /></label>

          <button id="refresh">

            <img

              src="https://cdn2.vectorstock.com/i/1000x1000/39/96/refresh-or-reload-symbol-blue-circular-arrow-vector-21433996.jpg"

              alt=""

              srcset=""

              height="12"

              width="12"

            />

          </button>

          <div class="captcha">6e69</div>

          <label for="captcha" id="captchaValidation"

            >Captcha Validation:<input type="text" id="captch" required

          /></label>

          <button id="search" onclick="show()">search....</button>

          <!-- </div> -->

        </div>

        <div id="second"></div>

      </div>

    </div>

  </body>

</html>

**gtu-grade-history.css**

\* {

  /\* background-color: gray; \*/

}

.mainBox {

  border: 1px solid black;

  /\* background-color: white; \*/

  /\* display: flex; \*/

  width: 70%;

  /\* align-items: center; \*/

  float: center;

  margin-left: 12.5em;

  margin-top: 3em;

  font-family: "Franklin Gothic Medium", "Arial Narrow", Arial, sans-serif;

}

.heading {

  display: flex;

  border: 1px solid black;

  background-color: skyblue;

}

.logo {

  flex: left;

}

.info {

  flex: right;

}

.first {

  display: flex;

  flex-direction: row;

  margin-top: 5px;

  margin-bottom: 5px;

  margin-left: 5px;

  margin-right: 5px;

}

.first > #enrollmentInput {

  flex: "20rem";

}

.first > #refresh {

  flex: "1rem";

}

.first > .captcha {

  flex: auto;

}

.first > #captchaValidation {

  flex: auto;

}

.first > #search {

  flex: auto;

}

.gtu {

  font-size: 50px;

  margin-left: 20px;

  margin-top: 15px;

  color: red;

}

.sgh {

  font-size: 30px;

  margin-left: 220px;

  color: aliceblue;

}

.captcha {

  border: 1px solid black;

}

#search {

  background-color: gray;

  /\* font-size: 18px; \*/

}

#search:hover {

  background-color: rgb(188, 152, 152);

}

#t90 {

  background-color: rgb(210, 180, 140);

  /\* font-family: "Lucida Sans", "Lucida Sans Regular", "Lucida Grande",

    "Lucida Sans Unicode", Geneva, Verdana, sans-serif;\*/

}

#t91 {

  background-color: rgb(250, 250, 210);

  /\* font-family: "Lucida Sans", "Lucida Sans Regular", "Lucida Grande",

    "Lucida Sans Unicode", Geneva, Verdana, sans-serif; \*/

}

#t92 {

  background-color: rgb(255, 228, 196);

}

#t93 {

  background-color: rgb(169, 226, 234);

}

#t94 {

  background-color: rgb(247, 221, 117);

}

**gtu-grade-history.js**

function show() {

const enr = document.querySelector("#enrollment");

const c = document.querySelector("#captch");

if (c.value == "6e69") {

second.innerHTML = `

<br>

<table>

<tr>

<td>Name :</td>

<td>LATHIYA YASH ANILBHAI</td>

</tr>

<tr>

<td>Enrollment No :</td>

<td>${enr.value}</td>

</tr>

<tr>

<td>Institute :</td>

<td>020--GOVERNMENT ENGINEERING COLLEGE, RAJKOT</td>

</tr>

<tr>

<td>Branch :</td>

<td>BE-07-COMPUTER ENGINEERING</td>

</tr>

</table>

<br>

<table border="1" width="100%" >

<tr id="t90">

<td>ENROLLMENT NO.</td>

<td>CPI</td>

<td>CGPA</td>

<td>TOT BACKL </td>

<td>BCK1</td>

<td>BCK2</td>

<td>BCK3</td>

<td>BCK4</td>

<td>BCK5</td>

<td>BCK6</td>

<td>BCK7</td>

<td>BCK8</td>

</tr>

<tr id="t91">

<td>${enr.value}</td>

<td>9.27</td>

<td>9.31</td>

<td>0</td>

<td>0</td>

<td>0</td>

<td>0</td>

<td>0</td>

<td>-</td>

<td>-</td>

<td>-</td>

<td>-</td>

</tr>

</table>

<br>

<table border="1" width="100%" id="t92" >

<tr>

<td>Last Exam</td>

<td>Sem</td>

<td>Declaration Date </td>

<td>Cur Back</td>

<td>SPI</td>

</tr>

<tr>

<td>BE SEM 4 - Regular (MAY 2022)</td>

<td>4</td>

<td>16-9-2022</td>

<td>0</td>

<td>8.61</td>

</tr>

</table>

<br>

<table border="1" width="100%" id="t93" >

<tr>

<td>SEM 1</td>

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</table>

<br>

<table border="1" width="100%" >

<tr>

<td>WINTER - 2020 (SEAT NO : 200200107095)</td>

<td>CUR. BACKLOG : 0</td>

</tr>

</table>

<table border="1" width="100%" id="t94" >

<tr>

<td>SUB CODE</td>

<td>SUBJECT NAME</td>

<td>E\_AB</td>

<td>TH ESE</td>

<td>TH PA</td>

<td>TH TOTAL</td>

<td>PR ESE</td>

<td>PR PA</td>

<td>PR TOTAL</td>

<td>PR TOTAL</td>

</tr>

<tr>

<td>3110005</td>

<td>Basic Electrical Engineering</td>

<td>-</td>

<td>AA</td>

<td>AB</td>

<td>AA</td>

<td>AA</td>

<td>AA</td>

<td>AA</td>

<td>AA</td>

</tr>

<tr>

<td>3110006</td>

<td>Basic Mechanical Engineering</td>

<td>-</td>

<td>AA</td>

<td>AB</td>

<td>AA</td>

<td>AA</td>

<td>AA</td>

<td>AA</td>

<td>AA</td>

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<tr>

<td>3110012</td>

<td>Workshop / Manufacturing Practise</td>

<td>-</td>

<td>AA</td>

<td>AB</td>

<td>AA</td>

<td>AA</td>

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<td>AA</td>

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</tr>

<tr>

<td>3110014</td>

<td>Mathematics - 1</td>

<td>-</td>

<td>AA</td>

<td>AB</td>

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<tr>

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<td>Induction Program</td>

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<td>AB</td>

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<tr>

<td>3110018</td>

<td>Physics</td>

<td>-</td>

<td>AA</td>

<td>AB</td>

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<td>TH PA</td>

<td>TH TOTAL</td>

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<tr>

<td>3110017</td>

<td>Induction Program</td>

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<tr>

<td>3110018</td>

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<td>SEM 3</td>

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<td>TH PA</td>

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<tr>

<td>SEM 4</td>

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<td>AA</td>

<td>AB</td>

<td>AA</td>

<td>AA</td>

<td>AA</td>

<td>AA</td>

<td>AA</td>

</tr>

</table>

`;

} else {

alert("plz enter correct captcha");

}

}

**Practical 3**

**Develop a User Registration Form using HTML, and CSS. Registration form must include all the form controls in HTML.**

**Index.html**

<!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" />

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

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

    <title>Registration Form</title>

  </head>

  <body>

    <div class="container">

      <form action="process\_form.php" method="post">

        <h1 class="mainHeading">Registration Form</h1>

        <hr />

        <h2>Contact Information</h2>

        <p>

          Name :

          <input

            id="name"

            type=""

            name="name"

            required

            placeholder="Sachin Tendulkar"

          />

        </p>

        <fieldset>

          <legend>Gender</legend>

          <p>

            Male <input type="radio" name="gender" id="male" /> Female

            <input type="radio" name="gender" id="Female" />

          </p>

        </fieldset>

        <p>

          Address:

          <textarea

            name="address"

            id="add"

            cols="100"

            rows="5"

            placeholder="House No., Building No., Area, City, State, Pincode"

          ></textarea>

        </p>

        <p>

          Email

          <input

            type="email"

            name="email"

            id="email"

            required

            placeholder="abc@amail.com"

          />

        </p>

        <p>

          Pincode

          <input type="number" name="pin" id="pin" placeholder="123456" />

        </p>

        <h2>Payment Information</h2>

        <p>

          card Type:

          <select name="card\_type" id="card\_type" required>

            <option value="">----Select a Card Type----</option>

            <option value="visa">Visa</option>

            <option value="MasterCard">Master card</option>

          </select>

        </p>

        <p>

          Card Number

          <input

            type="number"

            name="Card\_number"

            id="card\_Number"

            required

            placeholder="1111 1111 1111"

          />

        </p>

        <p>

          Expiration Date

          <input type="date" name="exp\_date" id="exp\_Date" required />

        </p>

        <p>

          cvv

          <input

            type="password"

            name="cvv"

            id="cvv"

            required

            placeholder="111"

          />

        </p>

        <div class="btnn">

          <input onClick="validation()" type="submit" value="Register" />

          <input type="reset" value="Reset" />

        </div>

      </form>

    </div>

  </body>

</html>

**registrationForm.css**

\* {

  box-sizing: border-box;

}

body {

  font-family: Verdana, Geneva, Tahoma, sans-serif;

  margin: 15px, 30px;

  font-size: 17px;

  padding: 8px;

}

.container {

  background-color: #f2f2f2;

  padding: 5px 20px 15px 20px;

  border: 1px solid lightgray;

  border-radius: 4px;

}

input[type="text"],

input[type="email"],

input[type="number"],

input[type="password"],

input[type="date"],

select,

textarea {

  width: 100%;

  padding: 12px;

  border: 1px solid #ccc;

  border-radius: 5px;

  margin: 10px;

}

fieldset {

  background-color: #fff;

  border: 1px solid #ccc;

}

.mainHeading {

  text-align: center;

}

.btnn {

  display: flex;

}

input[type="submit"] {

  background-color: rgba(8, 255, 70, 0.829);

  color: white;

  font-size: 20px;

  width: 100%;

  padding: 12px 20px;

  border: none;

  border-radius: 4px;

  flex: left;

  cursor: pointer;

}

input[type="submit"]:hover {

  background-color: rgba(16, 214, 82, 0.788);

}

input[type="reset"] {

  background-color: red;

  color: white;

  font-size: 20px;

  width: 100%;

  padding: 12px 20px;

  border: none;

  border-radius: 4px;

  flex: right;

  cursor: pointer;

}

input[type="reset"]:hover {

  background-color: rgb(245, 38, 38);

}

**Practical 4**

**Implement User Input Validation in the User Registration Form created in previous practical.**

**registrationForm.js**

function validation() {

var nameInput = document.getElementById("name");

var emailInput = document.getElementById("email");

var pinInput = document.getElementById("pin");

var cardTypeInput = document.getElementById("card\_type");

var cardNumberInput = document.getElementById("card\_Number");

var expDateInput = document.getElementById("exp\_Date");

var cvvInput = document.getElementById("cvv");

var isValid = true;

// Validate Name

if (nameInput.value.trim() === "") {

alert("Please enter your name.");

isValid = false;

}

// Validate Email

if (emailInput.value.trim() === "") {

alert("Please enter your email.");

isValid = false;

} else if (!isValidEmail(emailInput.value)) {

alert("Please enter a valid email address.");

isValid = false;

}

// Validate Pincode

if (pinInput.value.trim() === "") {

alert("Please enter your pincode.");

isValid = false;

} else if (pinInput.value.length !== 6) {

alert("Please enter a valid 6-digit pincode.");

isValid = false;

}

// Validate Card Type

if (cardTypeInput.value.trim() === "") {

alert("Please select a card type.");

isValid = false;

}

// Validate Card Number

if (cardNumberInput.value.trim() === "") {

alert("Please enter your card number.");

isValid = false;

}

// Validate Expiration Date

if (expDateInput.value.trim() === "") {

alert("Please enter the expiration date.");

isValid = false;

}

// Validate CVV

if (cvvInput.value.trim() === "") {

alert("Please enter the CVV.");

isValid = false;

} else if (cvvInput.value.length !== 3) {

alert("Please enter a valid 3-digit CVV.");

isValid = false;

}

// Submit the form if all inputs are valid

if (isValid) {

document.querySelector("form").submit();

}

}

// Helper function to validate email format

function isValidEmail(email) {

var emailRegex = /^[^\s@]+@[^\s@]+\.[^\s@]+$/;

return emailRegex.test(email);

}

**Practical 5**

**Develop a web based calculator using Javascript. Also use proper stylesheet to make it attractive.**

**Index.html**

<!DOCTYPE html>

<html>

  <head>

    <meta charset="utf-8" />

    <meta name="viewport" content="width=device-width" />

    <title>Practical5 : Calculator</title>

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

  </head>

  <body>

    <h1 class="text-center color">Practical 5 : Calculator</h1>

    <div class="container">

      <div class="row">

        <input type="text" class="row" />

      </div>

      <div class="row">

        <button class="buttons color">C</button>

        <button class="buttons color">AC</button>

        <button class="buttons color">%</button>

        <button class="buttons color">/</button>

      </div>

      <div class="row">

        <button class="buttons">7</button>

        <button class="buttons">8</button>

        <button class="buttons">9</button>

        <button class="buttons color">\*</button>

      </div>

      <div class="row">

        <button class="buttons">4</button>

        <button class="buttons">5</button>

        <button class="buttons">6</button>

        <button class="buttons color">-</button>

      </div>

      <div class="row">

        <button class="buttons">1</button>

        <button class="buttons">2</button>

        <button class="buttons">3</button>

        <button class="buttons color">+</button>

      </div>

      <div class="row">

        <button class="buttons color">00</button>

        <button class="buttons">0</button>

        <button class="buttons">.</button>

        <button id="equal" class="buttons">=</button>

      </div>

    </div>

    <div></div>

    <br />

    <br />

    <br />

    <br />

    <br />

    <br />

    <br />

    <br />

    <br />

    <br />

    <script src="script.js"></script>

  </body>

</html>

**style.css**

body {

  background: linear-gradient(

    45deg,

    hsl(175, 100%, 50%),

    hsl(200, 100%, 50%),

    hsl(305, 48%, 58%),

    hsl(305, 66%, 57%)

  );

}

.text-center {

  text-align: center;

  /\* text-color: white; \*/

}

.container {

  display: flex;

  flex-direction: column;

  align-items: center;

  left: 50%;

  margin-left: 50%

  /\* width: 400px; \*/

  padding: auto;

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

  /\* box-sizing: border-box; \*/

  box-shadow: 0 15px 25px rgba(0, 0, 0, 0.5);

  border-radius: 15px;

}

.row {

  margin: 5px 10px;

}

.row input {

  margin: 12px 0;

  padding: 10px 10px;

  border: 2px solid black;

  border-radius: 9px;

  font-size: 1.35rem;

}

.buttons {

  padding: 20px;

  margin: 0 3px;

  background-color: #fff;

  border: 2px solid black;

  border-radius: 9px;

  cursor: pointer;

  width: 67px;

  font-size: 20px;

  font-weight: bold;

}

.color {

  color: rgb(255, 136, 0);

}

#equal {

  background-color: rgb(255, 136, 0);

  color: white;

}

.text-center {

  /\* text-align: center; \*/

  color: white;

}

**script.js**

let string = "";

let buttons = document.querySelectorAll(".buttons");

Array.from(buttons).forEach((button) => {

  button.addEventListener("click", (e) => {

    // console.log(e.target.firstChild.innerHTML)

    if (e.target.innerHTML == "=") {

      string = eval(string);

      document.querySelector("input").value = string;

    } else if (e.target.innerHTML == "C") {

      string = "";

      document.querySelector("input").value = string;

    } else if (e.target.innerHTML == "AC") {

      string = string.slice(0, string.length - 1);

      console.log(string);

      document.querySelector("input").value = string;

    } else {

      string = string + e.target.innerHTML;

      document.querySelector("input").value = string;

    }

  });

});

**Practical 6**

**Create a Javascript program that demonstrates manipulating HTML documents using DOM objects.**

**Index.html**

<!DOCTYPE html>

<html>

<head>

<title>DOM Manipulation</title>

</head>

<body>

<h1 id="title">Original Title</h1>

<p id="content">Original Content</p>

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

</body>

</html>

**domManipulation.js**

document.addEventListener("DOMContentLoaded", function() {

// Access the DOM elements

var titleElement = document.getElementById("title");

var contentElement = document.getElementById("content");

// Change the text of the title element

titleElement.textContent = "Updated Title";

// Change the style of the content element

contentElement.style.color = "blue";

contentElement.style.fontSize = "20px";

// Create a new paragraph element

var newParagraph = document.createElement("p");

newParagraph.textContent = "This is a new paragraph.";

// Append the new paragraph to the body element

document.body.appendChild(newParagraph);

// Add an event listener to the title element

titleElement.addEventListener("click", function() {

alert("Title clicked!");

}); });

**Practical 6.2**

**Create a PHP page that takes a number using HTML Form and generate the multiplication table of that number.**

<!DOCTYPE html>

<html>

<body>

        <h1 style="color: green;">

          Web Programming Practical

        </h1>

        <h3>

            Program to print multiplication<br>

            table of any number in PHP

        </h3>

        <form method="POST">

            Enter a number:

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

            <input type="Submit"

                value="Get Multiplication Table">

        </form>

</body>

</html>

<?php

if($\_POST) {

    $num = $\_POST["number"];

    echo nl2br("<p style='text-align: center;'>

        Multiplication Table of $num: </p>

    ");

    for ($i = 1; $i <= 10; $i++) {

        echo ("<p style='text-align: center;'>$num"

            . " X " . "$i" . " = "

            . $num \* $i . "</p>

        ");

    }

}

?>

**Practical 7**

**Create a PHP page that takes a number using HTML Form and perform following operations (Use user defined functions):**

**1) Check whether the number is Armstrong or not.**

**2) Check whether the number is Perfect or not.**

**3) Check whether the number is Palindrome or not.**

<!DOCTYPE html>

<html>

<head>

    <title>Number Operations</title>

</head>

<body>

    <h2>Enter a Number:</h2>

    <form method="post" >

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

        <input type="submit" value="Submit">

    </form>

</body>

</html>

    <?php

        function isArmstrong($number) {

            $temp = $number;

            $sum = 0;

            while ($temp != 0) {

                $remainder = $temp % 10;

                $sum += pow($remainder, strlen((string)$number));

                $temp = (int)($temp / 10);

            }

            return ($sum == $number);

        }

        function isPerfect($number) {

            $sum = 0;

            for ($i = 1; $i <= ($number / 2); $i++) {

                if ($number % $i == 0) {

                    $sum += $i;

                }

            }

            return ($sum == $number);

        }

        function isPalindrome($number) {

            $reverse = 0;

            $temp = $number;

            while ($temp != 0) {

                $remainder = $temp % 10;

                $reverse = ($reverse \* 10) + $remainder;

                $temp = (int)($temp / 10);

            }

            return ($reverse == $number);

        }

        if ($\_POST) {

            $number = $\_POST["number"];

            if (isArmstrong($number)) {

                echo "$number is an Armstrong number.<br>";

            } else {

                echo "$number is not an Armstrong number.<br>";

            }

            if (isPerfect($number)) {

                echo "$number is a Perfect number.<br>";

            } else {

                echo "$number is not a Perfect number.<br>";

            }

            if (isPalindrome($number)) {

                echo "$number is a Palindrome number.<br>";

            } else {

                echo "$number is not a Palindrome number.<br>";

            }

        }

    ?>

**Practical 8**

**Create a PHP page that takes a string as input from user and perform following operations:**

**1) Display string in Uppercase**

**2) Display string in Lowercase**

**3) Display string in reverse.**

**4) Display number of characters in string**

**5) Display number of words in string**

<!DOCTYPE html>

<html>

<head>

    <title>String Operations</title>

</head>

<body>

    <?php

        if ($\_POST) {

            $string = $\_POST["string"];

            echo "Input String: $string<br><br>";

            echo "Uppercase String: " . strtoupper($string) . "<br>";

            echo "Lowercase String: " . strtolower($string) . "<br>";

            echo "Reverse String: " . strrev($string) . "<br>";

            echo "Number of Characters: " . strlen($string) . "<br>";

            echo "Number of Words: " . str\_word\_count($string) . "<br>";

        }

    ?>

    <h2>Enter a String:</h2>

    <form method="post" >

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

        <input type="submit" value="Submit">

    </form>

</body>

</html**>**

**Practical 9**

**Implement Login and Logout operations using PHP Cookies and Sessions variables.**

<!DOCTYPE html>

<html>

<head>

    <title>Login Page</title>

</head>

<body>

    <?php

        // Start a new or resume an existing session

        session\_start();

        // Check if the user is already logged in

        if (isset($\_SESSION["username"])) {

            echo "<h2>Welcome back, {$\_SESSION["username"]}!</h2>";

            echo "<p><a href='logout.php'>Logout</a></p>";

        } else {

            if (isset($\_COOKIE["username"])) {

                // If the user has a valid cookie, automatically log them in

                $\_SESSION["username"] = $\_COOKIE["username"];

                echo "<h2>Welcome back, {$\_SESSION["username"]}!</h2>";

                echo "<p><a href='logout.php'>Logout</a></p>";

            } else {

                // If the user is not logged in, display the login form

                if ($\_SERVER["REQUEST\_METHOD"] == "POST") {

                    $username = $\_POST["username"];

                    $password = $\_POST["password"];

                    // Validate the username and password (this is just an example)

                    if ($username == "user" && $password == "password") {

                        // Set a cookie with the username (valid for 7 days)

                        setcookie("username", $username, time() + (86400 \* 7), "/");

                        // Set the session variable

                        $\_SESSION["username"] = $username;

                        echo "<h2>Welcome, $username!</h2>";

                        echo "<p><a href='logout.php'>Logout</a></p>";

                    } else {

                        echo "<h2>Invalid username or password.</h2>";

                    }

                } else {

                    // Display the login form

                    echo "<h2>Login</h2>";

                    echo "<form method='post' action=''>";

                    echo "Username: <input type='text' name='username'><br>";

                    echo "Password: <input type='password' name='password'><br>";

                    echo "<input type='submit' value='Login'>";

                    echo "</form>";

                }

            }

        }

    ?>

</body>

</html>

**Practical 10**

**Implement Database Operations like Insert, and display on users record using the User Registration form created in Practical 3.**

**process-form.php**

<?php

// Retrieve the form inputs

$name = $\_POST['name'];

$gender = $\_POST['gender'];

$address = $\_POST['address'];

$email = $\_POST['email'];

$pincode = $\_POST['pin'];

$cardType = $\_POST['card\_type'];

$cardNumber = $\_POST['Card\_number'];

$expDate = $\_POST['exp\_date'];

$cvv = $\_POST['cvv'];

// Connect to the database

$servername = "localhost";

$username = "root";

$password = "Yash@2233";

$dbname = "WP\_LabManual";

$conn = new mysqli($servername, $username, $password, $dbname);

if ($conn->connect\_error) {

  die("Connection failed: " . $conn->connect\_error);

}

// Insert the user record into the database

$sql = "INSERT INTO users (name, gender, address, email, pincode, card\_type, card\_number, exp\_date, cvv)

        VALUES ('$name', '$gender', '$address', '$email', '$pincode', '$cardType', '$cardNumber', '$expDate', '$cvv')";

if ($conn->query($sql) === TRUE) {

  echo "User record inserted successfully.";

} else {

  echo "Error: " . $sql . "<br>" . $conn->error;

}

$conn->close();

?>

**Practical 11**

**Extend the practical 10 and add functionality to delete and update the users record.**

**process-form.php**

<?php

// Retrieve the form inputs

$name = $\_POST['name'];

$gender = $\_POST['gender'];

$address = $\_POST['address'];

$email = $\_POST['email'];

$pincode = $\_POST['pin'];

$cardType = $\_POST['card\_type'];

$cardNumber = $\_POST['Card\_number'];

$expDate = $\_POST['exp\_date'];

$cvv = $\_POST['cvv'];

// Connect to the database

$servername = "localhost";

$username = "root";

$password = "Yash@2233";

$dbname = "WP\_LabManual";

$conn = new mysqli($servername, $username, $password, $dbname);

if ($conn->connect\_error) {

  die("Connection failed: " . $conn->connect\_error);

}

// Insert the user record into the database

$sql = "INSERT INTO users (name, gender, address, email, pincode, card\_type, card\_number, exp\_date, cvv)

        VALUES ('$name', '$gender', '$address', '$email', '$pincode', '$cardType', '$cardNumber', '$expDate', '$cvv')";

if ($conn->query($sql) === TRUE) {

  $lastInsertId = $conn->insert\_id;

  echo "User record inserted successfully. ID: " . $lastInsertId . "<br>";

} else {

  echo "Error: " . $sql . "<br>" . $conn->error;

}

**// Update the user record**

$updateId = 1; // Example: update the user with ID 1

$sqlUpdate = "UPDATE users SET name='$name', gender='$gender', address='$address', email='$email', pincode='$pincode',

              card\_type='$cardType', card\_number='$cardNumber', exp\_date='$expDate', cvv='$cvv' WHERE id=$updateId";

if ($conn->query($sqlUpdate) === TRUE) {

  echo "User record updated successfully. ID: " . $updateId . "<br>";

} else {

  echo "Error updating record: " . $conn->error;

}

**// Delete the user record**

$deleteId = 2; // Example: delete the user with ID 2

$sqlDelete = "DELETE FROM users WHERE id=$deleteId";

if ($conn->query($sqlDelete) === TRUE) {

  echo "User record deleted successfully. ID: " . $deleteId . "<br>";

} else {

  echo "Error deleting record: " . $conn->error;

}

$conn->close();

?>

**Practical 12**

**Write a PHP script that keeps track of how many times a visitor has accessed the page.**

<!DOCTYPE html>

<html>

<head>

    <title>Visitor Counter</title>

</head>

<body>

    <?php

        // Check if the visitor has a valid cookie

        if (isset($\_COOKIE["visits"])) {

            $visits = $\_COOKIE["visits"] + 1;

            setcookie("visits", $visits, time() + (86400 \* 30), "/");

            echo "<h2>Welcome back! You have visited this page $visits times.</h2>";

        } else {

            $visits = 1;

            setcookie("visits", $visits, time() + (86400 \* 30), "/");

            echo "<h2>Welcome! This is your first time visiting this page.</h2>";

        }

    ?>

</body>

</html>

**Practical 13**

**Develop a web page to demonstrate the use of Jquery.**

<!DOCTYPE html>

<html>

<head>

<title>jQuery Demo</title>

<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>

<style>

.box {

width: 200px;

height: 200px;

background-color: blue;

color: white;

text-align: center;

line-height: 200px;

font-size: 24px;

cursor: pointer;

}

</style>

</head>

<body>

<div class="box">Click Me</div>

<script>

// Wait for the DOM content to load

$(document).ready(function() {

// Add a click event handler to the box element

$(".box").click(function() {

// Change the background color and text of the box

$(this).css("background-color", "red").text("Clicked!");

});

});

</script>

</body>

</html>

**Practical 14**

**Implement search facility in the practical 10 using Ajax. Allow search by username, city, state, country and birth year.**

**process\_form.php**

<?php

// Retrieve the search query

$searchQuery = $\_POST['searchQuery'];

// Connect to the database

$servername = "localhost";

$username = "your\_username";

$password = "your\_password";

$dbname = "your\_database\_name";

$conn = new mysqli($servername, $username, $password, $dbname);

if ($conn->connect\_error) {

die("Connection failed: " . $conn->connect\_error);

}

// Prepare the search query

$searchSql = "SELECT \* FROM users WHERE name LIKE '%$searchQuery%' OR city LIKE '%$searchQuery%'

OR state LIKE '%$searchQuery%' OR country LIKE '%$searchQuery%' OR birth\_year = '$searchQuery'";

$result = $conn->query($searchSql);

if ($result->num\_rows > 0) {

// Display the search results

while ($row = $result->fetch\_assoc()) {

echo "ID: " . $row["id"] . "<br>";

echo "Name: " . $row["name"] . "<br>";

echo "Gender: " . $row["gender"] . "<br>";

echo "Address: " . $row["address"] . "<br>";

echo "Email: " . $row["email"] . "<br>";

echo "Pincode: " . $row["pincode"] . "<br>";

echo "Card Type: " . $row["card\_type"] . "<br>";

echo "Card Number: " . $row["card\_number"] . "<br>";

echo "Expiration Date: " . $row["exp\_date"] . "<br>";

echo "CVV: " . $row["cvv"] . "<br>";

echo "<hr>";

}

} else {

echo "No results found.";

}

$conn->close();

?>

**Ajax implementation**

<form id="searchForm">

<input type="text" name="searchQuery" id="searchQuery" placeholder="Search by username, city, state, country or birth year" />

<button type="submit">Search</button>

</form>

<div id="searchResults"></div>

<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>

<script>

$(document).ready(function() {

// Handle the form submission

$('#searchForm').submit(function(event) {

event.preventDefault(); // Prevent form submission

var searchQuery = $('#searchQuery').val();

// Send the Ajax request

$.ajax({

url: 'process\_form.php',

type: 'POST',

data: { searchQuery: searchQuery },

success: function(response) {

$('#searchResults').html(response);

},

error: function(xhr, status, error) {

console.log(error);

}

});

});

});

</script>