FRONT END DESIGN TECHNIQUES LAB
(IT-664)

PRACTICAL FILE

SUBMITTED TO-
Mr. Nitendra

SUBMITTED BY-
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UNIVERSITY SCHOOL OF INFORMATION COMMUNICATION AND TECHNOLOGY

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Practical-1

AIM- What is frontend? Write a note on html, css and javascript?

The frontend refers to the user-facing part of a web application or website. It encompasses everything that users interact with directly in their web browsers, including the layout, design, content, and interactivity. Frontend development involves creating and implementing the visual and interactive elements of a web application or website to provide an engaging user experience

HTML (Hypertext Markup Language):

HTML is the standard markup language for creating the structure and content of web pages.

It consists of a series of elements, each represented by tags, which define the structure and semantics of the content.

HTML provides a hierarchical structure for organizing content, such as headings, paragraphs, lists, images, links, forms, and more.

It forms the backbone of web pages, providing the basic building blocks for displaying information on the web.

CSS:

CSS is a stylesheet language used to control the presentation and appearance of HTML documents.

It allows developers to define styles, such as colors, fonts, layouts, and spacing, to visually enhance and customize the appearance of web pages.

CSS operates on a cascading principle, where styles can be applied hierarchically and overridden as needed.

With CSS, developers can create responsive designs that adapt to different screen sizes and devices, improving the accessibility and usability of web pages.

JavaScript:

JavaScript is a versatile programming language used to add dynamic behavior and interactivity to web pages.

It allows developers to manipulate HTML and CSS, handle user events, perform calculations, make network requests, and update the content of web pages dynamically.

JavaScript can be used to create interactive features such as animations, form validation, dynamic content updates, and client-side data processing.

It is supported by all modern web browsers and is essential for building rich and interactive web applications.

Practical-2

AIM- Using HTML Tags, design your own curriculum vitae.

CODE:

```html
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Pragyay Kumar Singh - Curriculum Vitae</title>

  <style>

    body {

      font-family: Arial, sans-serif;

      margin: 0;

      padding: 0;

      background-color: #f9f9f9;

    }

    header {

      background-color: grey;

      color: #fff;

      padding: 20px;

      text-align: center;

    }

    section {

      margin: 20px;

    }

    h1{

      color: white;

    }

    h2{

      color: black;

    }

    p {

      margin-bottom: 10px;
```
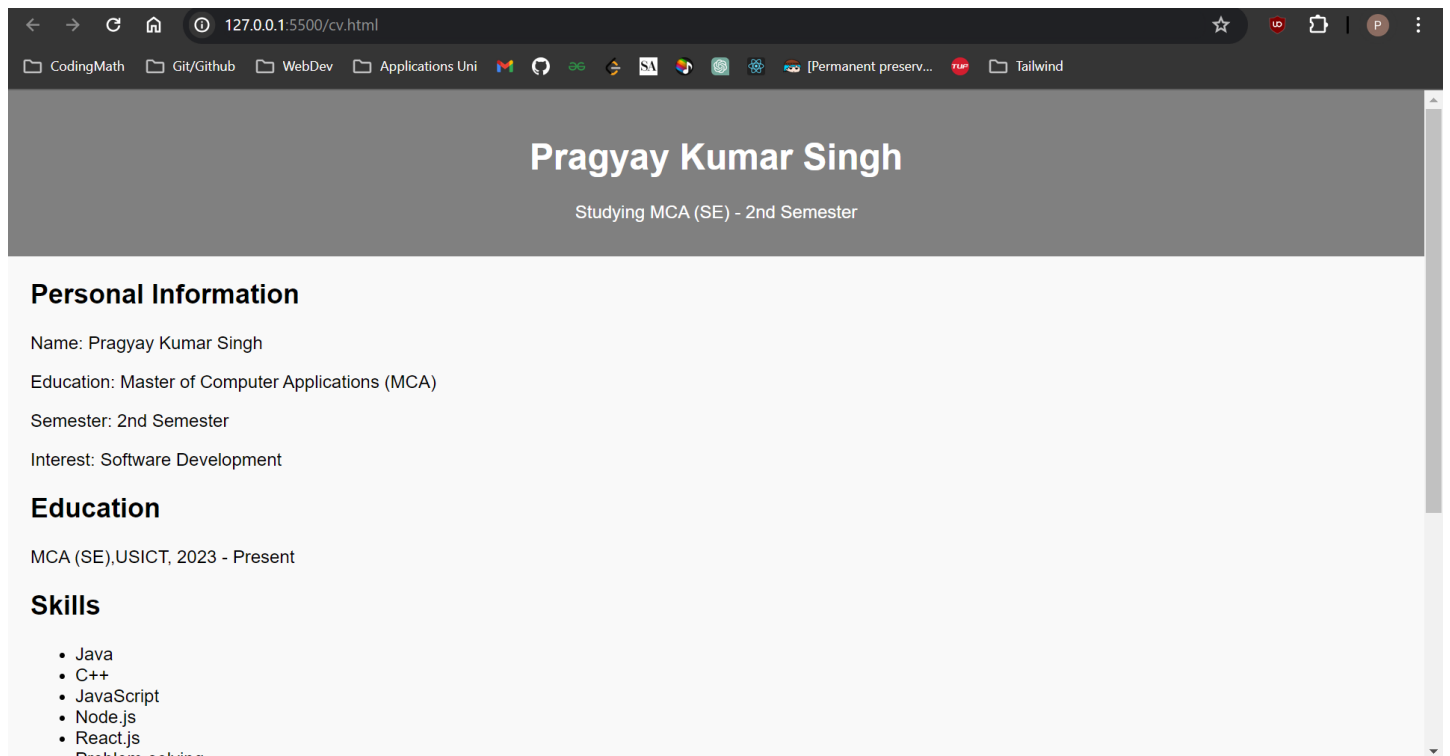
```html
        }
      </style>
  </head>
  <body>
    <header>
      <h1>Pragyay Kumar Singh</h1>
      <p>Studying MCA (SE) - 2nd Semester</p>
    </header>
    <section>
      <h2>Personal Information</h2>
      <p>Name: Pragyay Kumar Singh</p>
      <p>Education: Master of Computer Applications (MCA)</p>
      <p>Semester: 2nd Semester</p>
      <p>Interest: Software Development</p>
    </section>
    <section>
      <h2>Education</h2>
      <p>MCA (SE),USICT, 2023 - Present</p>
    </section>
    <section>
      <h2>Skills</h2>
      <ul>
        <li>Java</li>
        <li>C++</li>
        <li>JavaScript</li>
        <li>Node.js</li>
        <li>React.js</li>
        <li>Problem-solving</li>
      </ul>
    </section>
    <section>
      <h2>Projects</h2>
      <p><b>Project Name</b>: Cloth Simulation </p>
      <p>Realtime cloth Simulation using verlet integration</p>
```

```html
    <p><b>Project Name</b>: Sorting Visualizer </p>

    <p>Visualize sorting algorithms</p>

  </section>

  <section>

    <h2>Contact Information</h2>

    <p>Email: pksingh@gmail.com</p>

    <p>Phone: 999999999</p>

  </section>

</body>

</html>
```

OUTPUT:

Practical-3

AIM-Using HTML Tags, redesign the homepage of GGSIP university.

#CODE

```
<!DOCTYPE html>

<html lang="en">
<head>

    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>GGSIPU University</title>

    <script src="https://kit.fontawesome.com/c196823c45.js" crossorigin="anonymous"></script>
</head>
<body>

    <div id="id5">

        <div>

            <div class="id1">
                <ul class="ul1">
                    <li>Placements</li>

                    <li>Library</li>
                    <li>Departments</li>
                    <li>Events</li>

                    <li>Student Cell</li>
                    <li><i class="fa-brands fa-facebook-f"></i></li>

                    <li><i class="fa-brands fa-twitter"></i></li>
                    <li><i class="fa-brands fa-youtube"></i></li>
                    <li><i class="fa-brands fa-linkedin"></i></li>

                </ul>
            </div>

        </div>
        <div>
            <div class="logo">

                <span>

                    <img src="/logo.png" height="130px" width="130px">
                </span>

                <span>
                    <h2 style="line-height: 40px; margin-top: 22px;">Guru Gobind Singh <br>Indraprastha
```

```html
        University</h2> </span>
        <span>

          <h2 style="line-height: 40px; margin-top: 22px;">गुरु गोबिन्द ब ह <br>इद्रप्रस्थ बिश्वबिदयालय

          </h2>

        </span>

      </div>
      <div class="id1">
        <ul class="ul1">

          <li>About Us</li>
          <li>Administrator</li>

          <li>Academic</li>
          <li>Admission</li>
          <li>Department / Center</li>

          <li>Research and Consultancy</li>
        </ul>

      </div>

    </div>
</div>

<div class="middle">
  <div>
    <img src="/ggsipu home.jpg" height="400px" width="700px">

  </div>
  <div class="middle2">
    <h1>VISION</h1><br>

    <P>To be a university globally trusted for technical excellence  learning and research integrate to

      sustain society and industry.</P><br>

    <h1>MISSION</h1><br>
    <ul>
      <li>To offer undergraduate, postgraduate, doctoral and modular ps in multi-disciplinary /

        inter-disciplinary and emerging areas.</li>

      <li>To create a converging learning environment to serve a dynamically evolving society.</li>

      <li>To promote innovation for sustainable solutions by collaborations with academia and

        industry in cutting-edge research.</li>
```

```html
      <li>To be an intellectual ecosystem where human capabilities can develop holistically.</li>
    </ul>

  </div>

</div>

<div class="container">
  <div class="row">
    <div class="ul2">

      <div>
        <h2 class="notes">Admission Circulars</h2>
        <hr>

      </div>

      <div id="underul">

        <ul id="liststyle">
          <li>MBA Admissions 2024</li>
          <li>Income-Based Tuition Fee Remission Eligible List for Evem Sem 2023-2024</li>

          <li>M.A. English (Language and Literature) Admission 2024-25</li>
          <li>UG Supplementary Examination - January 2024</li>
          <li>Reassessment for PhD/MS Programme - July 2023 Session</li>

          <li>Reassessment for PG Programme - January 2024 Session</li>
          <li>Last date for Income Based Tuition Fee Remission - AY 2023-24</li>

          <li>PG Revaluation of final Assessment - July session 2023</li>
          <li>Deregistration / Elective change / Late registration Circular- January 2024</li>

          <li>MS/Ph.D. newly admitted students even Sem 2023-24</li>

          <li>Hostel Fees for even Semester 2023-24</li>
          <li>Institute Fee Circular Even Semester 2023-24</li>

          <li>Academic Schedule of January 2024 session for PG Programmes</li>

          <li>All students are instructed to provide their ABCs ID without delay</li>
          <li>Formative Assessment Circular December 2023</li>

          <li>SBI Collect Payment Mode Circular</li>

          <li>Income-Based Tuition Fee Remission Eligible List Even Semester 2023-2024</li>
          <li>Income-Based Fee Remission Eligible List (2023 Admitted UG Students)</li>

          <li>Circular - First Year PG - M.Tech M.Arch</li>
          <li>Application for the Bonafide certificate - scholarship</li>

          <li>Income-Based Tuition Fee Remission for 2023 Admitted B.Tech.& B.Arch.</li>
```

```
              </ul>
        </div>

        <hr>

    </div>

    <div class="ul2">
        <div>
            <h2 class="notes">Notice / Downloads</h2>

            <hr>
        </div>
        <div id="underul">

            <ul id="liststyle">

                <li>Faculty Recruitment</li>

                <li>List of Selected Candidates and Waitlisted for Group B and C  (2023)</li>
                <li>Inviting applications for JRF in Department of ECE, March 08, 2024</li>
                <li>SERB Sponsored Internship in Civil, March 20, 2024</li>

                <li>Inviting applications for Internship in Department of ECE, March 03, 2024</li>
                <li>Inviting applications for Project Assistant in Department of CSE, date extended to

                    March 01, 2024</li>

                <li>Boeing Scholarship circular 2024</li>
                <li>Students Finacial support AY-2023-2024</li>

                <li>List of Holidays in the year 2024</li>
                <li>Group C : Assistant, Office Attendant, Lab Attendant Candidates

                    provisionally shortlisted for Screening Test, Skill Test, Main Test and Schedule</li>

                <li>STUDENTS FINANCIAL SUPPORT - AY 2023-2024</li>
                <li>Compassionate Ground Appointment — Point Based Merit System and procedure for

                    selection</li>

                <li>Group A Deputation - List of Provisionally Selected Candidates</li>
                <li>Group A Direct Recruitment - List of Provisionally Selected Candidates</li>

                <li>Student Aid Fund (AY 2023-2024)</li>

                <li>Anti Ragging Committee 2023-24</li>
                <li>Accessible India Campaign (Sugamya Bharat Abhiyan) portal</li>

                <li>Circular for Students - Opening Bank Account in SBI GGSIPU branch</li>
                <li>CEDI - CALL for Innovative Startup IDEAs 2023-24</li>

                <li>Hostel Fees for ODD Semester 2023-24</li>
```

```html
            <li>Notification for QIP Admission 2023-24 under AICTE scheme</li>
            <li>MBA - HOSTEL FEES FOR ODD SEMESTER 2023-24</li>

         </ul></div><hr></div>

      <div class="ul2">

         <div>
            <h2 class="notes">Academic / Quicklinks</h2>
            <hr></div>

         <div id="underul">
            <ul id="liststyle">
               <li>Virtual tour of GGSIPU</li>

               <li>Internal Complaints committee - Sexual Harassment of Women at Workplace

                  (Prevention, Prohibition & Redressal)</li>

               <li>Faculty Profile</li>
               <li>List of Q1 Journals as per Scimago Ranking</li>
               <li>Course Registration in PHD</li>

               <li>PHD link for Students/Scholars (Intranet)</li>
               <li>PHD link for Staff/Faculty (Intranet)</li>
               <li>Institute Employees Directory (last updated during February 2024)</li>

               <li>New Internal Telephone Directory (February 2023)</li>
               <li>Planning and Development</li>

               <li>Institute Development</li>
               <li>TEQIP-III</li>

               <li>Facilities & Services</li>

               <li>Forms - Formats for Download</li>
               <li>Scholarship</li>

               <li>Scholarship</li>

               <li>Travel Support</li>
               <li>Internet Facility</li>

               <li>Hostel Complaint</li>
               <li>Student Cell</li>
               <li>Placements Cell</li>

               <li>Adademic Calender</li>
            </ul></div><hr></div></div> </div>

<div id="footer">
```

```html
<section id="footer-content">
  <div class="kuchbhi">

    <div>

      <b>Academics</b><br><br>

      <ul>
         <li>Academic Programs</li>
         <li>Departments</li>

         <li>Faculty</li>
         <li>Rules / Regulations</li>
         <li>Scholarships</li>

      </ul></div><div>

      <b>Admissions</b><br><br>

      <ul>
         <li>Btech</li>
         <li>Mtech</li>

         <li>Mca</li>
         <li>Bca</li>
         <li>Phd</li>

      </ul>
    </div>

    <div>
      <b>Student Life</b><br><br>

      <ul>

         <li>Events</li>
         <li>Clubs</li>

         <li>Facilities</li>

         <li>Hotel & Mess</li>
         <li>Office of Dean</li>

      </ul>

    </div>
    <div>

      <b>Other links</b><br><br>
      <ul>

         <li>Tinder</li>
```

```html
                <li>Facebook</li>
                <li>Alumi</li>

                <li>RTI</li>

                <li>Sitemaps</li>

            </ul></div>
          <div>
            <b>Contact Us</b><br><br>

            <ul>
               <li>GGSIPU</li>
               <li>Dwarka sec- 16</li>

               <li>Delhi</li>

               <li>INDIA</li>

               <li>Tele:- 4567891237</li>
            </ul></div></div>
      </section>

      <div class="last">
         <div class="last1">
            <i class="fa-regular fa-copyright"></i> WebTeam GGSIPU <br>Guru Gobind Singh

             Indraprastha University

         </div>

         <div class="last2">
            <ul>
               <li>HOME</li>

               <li>ABOUT</li>
               <li>CONTACT</li>

            </ul>
         </div> </div></div>
<style>

   * {
      margin: 0;

      padding: 0;

   }
   #id5 {

      font-size: 20px;
```

```css
    }
.id1 {

    padding-top: 25px;

    padding-bottom: 30px;

    background: #041d53;

}
.ul1 li {

    color: #fff;

    padding-right: 15px;

    padding-left: 15px;

    margin-right: auto;

    margin-left: auto;

    list-style-type: none;

}
.ul1 {

    display: flex;
}
.logo {

    background-color: #b9eafc69;

    padding-top: 23px;

    padding-right: 15px;

    padding-left: 15px;

    margin-right: auto;

    margin-left: auto;

    display: flex;

    line-height: 80px;

    vertical-align: middle;

}
.logo span {
    padding-right: 15px;

    padding-left: 15px;

    margin-right: auto;

    margin-left: auto;

}
```

```css
.middle {
    background-color: #b9eafc69;

    display: flex;

    padding-top: 31px;

    padding-right: 15px;

    padding-left: 15px;

    margin-right: auto;

    margin-left: auto;

    padding-bottom: 29px;

}
.middle2 {
    padding-right: 15px;

    padding-left: 71px;

    margin-right: auto;

    margin-left: auto;

    margin-top: 50px;

}
#liststyle li {

    color: #041d53;

}
.container {
    background-color: #b9eafc69;

    padding-right: 15px;

    padding-left: 15px;

    margin-right: auto;

    margin-left: auto;

}
.row {

    line-height: 27px;

    display: flex;/

}
.notes {
    height: 45px;

    background-color: #041d53;
```

```css
    color: #ffcb04;

    margin-bottom: 35px;

    line-height: 41px;

    text-align: center;

    border-radius: 50px;

}
#liststyle {

    padding-left: 0;

}
#liststyle li {

    border-bottom: 1px solid rgba(0, 0, 0, 0.1);

    padding-left: 5px;

    padding-right: 5px;
}
#underul {

    background-color: #fff;

    overflow-y: scroll;

    max-height: 350px;

}

.ul2 {

    height:  429px;

    width:   371px;

    padding: 20px;

    margin: 20px;

}

#footer {
    background: #041d53;

    color: #fff;

}
#footer-content {

    position: relative;

}
.kuchbhi {

    display: flex;
```

```css
        padding-right: 15px;

        padding-left: 15px;

        margin-right: auto;

        margin-left: auto;

    }
    .kuchbhi div {

        font-size: 19px;

        padding: 43px;

        margin: 23px;

    }

    .last {
        display: flex;

        padding-right: 15px;

        padding-left: 33px;

        padding-bottom: 30px;

    }
    .last1 {
        margin-top: 32px;

        vertical-align: middle;/

    }

    .last2 {
        padding-left: 227px;

        margin-left: 375px;

    }
    .last2 ul {

        display: flex;

        list-style-type: none;
    }

    .last2 ul li {

        margin: 30px;

    }
  </style>
</body>

</html>
```

#OUTPUT

Guru Gobind Singh Indraprastha University

गुरु गोबिन्द सिंह इन्द्रप्रस्थ विश्वविद्यालय

About Us   Administrator   Academic   Admission   Department / Center   Research and Consultancy

VISION

To be a university globally trusted for technical excellence where learning and research integrate to sustain society and industry.

MISSION

- To offer undergraduate, postgraduate, doctoral and modular programmes in multi-disciplinary / inter-disciplinary and emerging areas.
- To create a converging learning environment to serve a dynamically evolving society.
- To promote innovation for sustainable solutions by forging global collaborations with academia and industry in cutting-edge research.
- To be an intellectual ecosystem where human capabilities can develop holistically.

Admission Circulars

- MBA Admissions 2024
- Income-Based Tuition Fee Remission Eligible List for Even Sem 2023-2024
- M.A. English (Language and Literature) Admission 2024-25
- UG Supplementary Examination - January 2024
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- PG Revaluation of final Assessment - July

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- Academic Programs
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- Scholarships

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- Events
- Clubs
- Facilities
- Hotel & Mess
- Office of Dean

Other links
- Tinder
- Facebook
- Alumi
- RTI
- Sitemaps

Contact Us
- GGSIPU
- Dwarka sec- 16
- Delhi
- INDIA
- Tele:- 4567891237

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Guru Gobind Singh Indraprastha University

Practical-4

AIM- Write a XML Program to display Student profile having age like student roll no.,name age, semester, email id, phone number, department name, apply and validate using DTD.

CODE

// expt4.dtd

```
<!ELEMENT student_profile (student)>

<!ELEMENT student (roll_no, name, age, semester, email, phone_number, department)>

<!ELEMENT roll_no (#PCDATA)>

<!ELEMENT name (#PCDATA)>

<!ELEMENT age (#PCDATA)>

<!ELEMENT semester (#PCDATA)>

<!ELEMENT email (#PCDATA)>

<!ELEMENT phone_number (#PCDATA)>

<!ELEMENT department (#PCDATA)>
```

// expt4.xml

```
<!DOCTYPE student_profile SYSTEM "exp4.dtd">

<student_profile>

<rollNo>02116404523</rollNo>

<name>Pragyay Kumar Singh </name>

<age>22</age>

<semester>2</semester>

<email>pksingh @gmail.com</email>

<phoneNumber>9999999999</phoneNumber>

<department>MCA</department>

</student_profile>
```

OUTPUT

```xml
<student_profile>
    <rollNo>02116404523</rollNo>
    <name>Pragyay Kumar Singh </name>
    <age>22</age>
    <semester>2</semester>
    <email>pksingh @gmail.com</email>
    <phoneNumber>9999999999</phoneNumber>
    <department>MCA</department>
</student_profile>
```

Practical-5

AIM- Write a JavaScript Program to check weather an input number is palindrome number or not.

CODE

```
// Function to check if a number is palindrome
function isPalindrome(num) {
    // Convert the number to string for easier manipulation
    let numString = num.toString();
    // reverse number
    let reversedString = numString.split('').reverse().join('');
    // check if original and reversed number same
    return numString === reversedString;
}

// example
let number = 12321;
if (isPalindrome(number)) {
    console.log(number + " is a palindrome number.");
} else {
    console.log(number + " is not a palindrome number.");
}
```

#OUTPUT

```
12321 is a palindrome number.
```

Practical-6

AIM- Write a JSP Program to auto refresh a page.

CODE

```
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>
<!DOCTYPE html>

<html>

<head>

    <meta charset="UTF-8">

    <title>Auto Refresh Page</title>

    <meta http-equiv="refresh" content="5"> <!-- Refresh every 5 seconds -->
</head>

<body>
    <h1>Auto Refresh Page</h1>


    <p>This page will auto-refresh every 5 seconds.</p>


    <!-- Add your content here -->
</body>
</html>
```

#OUTPUT

Auto Refresh Page

This page will auto-refresh every 5 seconds.

Practical-7

AIM- Write a JSP Program to upload file into server.

#CODE

Index.jsp

```
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>
<!DOCTYPE html>

<html>
<head>

    <meta charset="UTF-8">

    <title>File Upload</title>
</head>

<body>
    <h1>File Upload on Server</h1>


    <form method="post" action="documentupload" enctype="multipart/form-data">

        Select file to upload:<br><br>

        <input type="file" name="file" id="file">
        <br><br>
        <input type="submit" value="Upload File" name="submit">

    </form>


</body>

</html>
```

DOCUPLOAD.java

```java
package document; import java.io.*;
import javax.servlet.ServletException;
import javax.servlet.annotation.MultipartConfig; // Import MultipartConfig annotation import
javax.servlet.annotation.WebServlet;
import javax.servlet.http.*;

@WebServlet("/FileUploadServlet") @MultipartConfig // Add MultipartConfig annotation public class
documentupload extends HttpServlet {
private static final long serialVersionUID = 1L; @Override
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
// Get the upload directory path within the web application
String uploadDir = getServletContext().getRealPath("") + File.separator + "uploads";
// Create the upload directory if it doesn't exist File dir = new File(uploadDir);
if (!dir.exists()) { dir.mkdirs();
}
// Process the file upload
Part filePart = request.getPart("file");
String fileName = getSubmittedFileName(filePart); String filePath = uploadDir + File.separator +
fileName; OutputStream out = null;
InputStream fileContent = null; try {
out = new FileOutputStream(new File(filePath)); fileContent = filePart.getInputStream();
int read;
final byte[] bytes = new byte[1024];
while ((read = fileContent.read(bytes)) != -1) { out.write(bytes, 0, read);
}
response.getWriter().println("File " + fileName + " has been uploaded successfully!");
} catch (FileNotFoundException e) { response.getWriter().println("Error: File not found.");
} finally {
if (out != null) {

out.close();
}




}}}

if (fileContent != null) { fileContent.close();

private String getSubmittedFileName(Part part) {
for (String content : part.getHeader("content-disposition").split(";")) { if
(content.trim().startsWith("filename")) {
return content.substring(content.indexOf('=') + 1).trim().replace("\"", "");
}}
return null;
}}
```

#OUTPUT

File Upload on Server

Select file to upload:

Choose File   wp2949958.jpg

Upload File

```
File wp2949958.jpg has been uploaded successfully!
```

Practical-8

AIM- Write a Generic Servlet program to display your own Enrollment number and Name using Apache Tomcat server.

#CODE

```java
package enrollment;

import java.io.IOException;
import javax.servlet.GenericServlet;
import javax.servlet.ServletException;
import javax.servlet.ServletRequest;
import javax.servlet.ServletResponse;

public class MyInfoServlet extends GenericServlet {
    private static final long serialVersionUID = 1L;

    @Override
    public void service(ServletRequest request, ServletResponse response) throws ServletException, IOException {
        // Set content type to HTML response.setContentType("text/html");

        // Output enrollment number and name response.getWriter().println("<html>");
        // response.getWriter().println("<head><title>My Info</title></head>");
        // response.getWriter().println("<body>");
        response.getWriter().println("<h1>Enrollment Number: 02116404523</h1>");
        response.getWriter().println("<h1>Name:Pragyay Kumar Singh </h1>");
        response.getWriter().println("</body>");
        response.getWriter().println("</html>");
    }
}
```

OUTPUT

Enrollment Number: 02116404523

Name:Pragyay Kumar Singh

Practical-9

AIM- Write a HTTP Servlet program to display all the HTTP Request Header parameters.

CODE

```java
package parameter;

import java.io.IOException;

import java.io.PrintWriter;

import java.util.Enumeration;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;


@WebServlet("/DisplayHeadersServlet")
public class DisplayHeadersServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;

    /**
     * *
     *
     * @param request* @param response* @throws ServletException* @throws
     *          IOException
     */
    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        PrintWriter out = response.getWriter();
        out.println("<html>");
        out.println("<head>");
        out.println("<title>HTTP Request Headers</title>");
        out.println("</head>");
```

```java
        out.println("<body>");
        out.println("<h1>HTTP Request Headers</h1>");
        out.println("<table border=\"1\">");
        out.println("<tr><th>Header Name</th><th>Header Value</th></tr>");


        Enumeration<String> headerNames = request.getHeaderNames();
        if (headerNames != null) {
            while (headerNames.hasMoreElements()) {
                String headerName = headerNames.nextElement();
                Enumeration<String> headers = request.getHeaders(headerName);
                while (headers.hasMoreElements()) {
                    String headerValue = headers.nextElement();
                    out.println("<tr><td>" + headerName + "</td><td>" + headerValue + "</td></tr>");
                }
            }
        } else {
            out.println("<tr><td colspan=\"2\">No headers present in the request.</td></tr>");
        }
        out.println("</table>");
        out.println("</body>");
        out.println("</html>");
    }
}
```

OUTPUT

HTTP Request Headers

Header Name	Header Value
host	localhost:8080
connection	keep-alive
sec-ch-ua	"Chromium";v="124", "Microsoft Edge";v="124", "Not-A.Brand";v="99"
sec-ch-ua-mobile	?0
sec-ch-ua-platform	"Windows"
upgrade-insecure-requests	1
user-agent	Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/537.36 Edg/124.0.0.0
accept	text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7
sec-fetch-site	none
sec-fetch-mode	navigate
sec-fetch-user	?1
sec-fetch-dest	document
accept-encoding	gzip, deflate, br, zstd
accept-language	en-US,en;q=0.9

Practical-10

AIM- Write a HTTP Servlet program to create a Cookie.

CODE

```java
package ck;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.Cookie;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/CreateCookieServlet")
public class cookie extends HttpServlet {
    private static final long serialVersionUID = 1L;

    /**
     *
     * @param request
     * @param response
     * @throws ServletException
     * @throws IOException
     */
    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        // Create a new cookie
        Cookie cookie = new Cookie("myCookie", "cookieValue");
        // Set cookie max age (in seconds) cookie.setMaxAge(3600); // 1 hour (3600
        // seconds)
        // Add cookie to the response response.addCookie(cookie);
```

```java
        response.setContentType("text/html;charset=UTF-8");


        response.getWriter().println("<html>");

        response.getWriter().println("<head><title>Cookie Created</title></head>");

        response.getWriter().println("<body>");

        response.getWriter().println("<h1>Cookie Created Successfully</h1>");

        response.getWriter().println(

            "<p>A cookie named 'myCookie' has been created with value 'cookieValue' and max age of 1 hour.</p>");

        response.getWriter().println("</body>");

        response.getWriter().println("</html>");

    }
}
```

OUTPUT

Cookie Created Successfully

A cookie named 'myCookie' has been created with value 'cookieValue' and max age of 1 hour.

Practical-11

AIM- Write a JDBC Program to fetch the employees records from the Employee table designed in MS Access. The Table should have fields like : Employee ID, Name, DOB, Address, Department, DOJ, Position etc.

#CODE

```
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>Employee Records</title>

</head>

<body>

<h1>Employee Records</h1>

Click here to Fetch Employee Records from Your Employee Database<br><br>

<form action="FetchEmployee" method="post">

<input type="submit" value="Fetch Employees">

</form>


<%

java.sql.ResultSet resultSet = (java.sql.ResultSet) request.getAttribute("resultSet"); if(resultSet != null) {

%>

<table border="1"><br><br>

<tr>

<th>Employee ID</th>

<th>Employee Name</th>

<th>DOB</th>

<th>Address</th>


<th>Department</th>

<th>DOJ</th>

<th>Position</th>

<!-- Add more columns as needed -->
```

```jsp
</tr>
<% while (resultSet.next()) { %>
<tr>
<td><%= resultSet.getInt("Employee_id") %></td>
<td><%= resultSet.getString("Employee_name") %></td>
<td><%= resultSet.getString("DOB") %></td>



<td><%= resultSet.getString("address") %></td>
<td><%= resultSet.getString("department") %></td>
<td><%= resultSet.getString("DOJ") %></td>
<td><%= resultSet.getString("position") %></td>
<!-- Add more columns as needed -->
</tr>
<% } %>
</table>
<% } %>
</body>
</html>
```

getEmployee.java

```java
package records; import java.io.*;

 import java.sql.*;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.*;


@WebServlet("/FetchEmployees")

public class FetchEmployee extends HttpServlet {


private static final long serialVersionUID = 1L;



@Override

protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

Connection connection = null; Statement statement = null; ResultSet resultSet = null;


try {
// Load the JDBC driver Class.forName("com.mysql.cj.jdbc.Driver");


// Establish connection String url;

url = "jdbc:mysql://localhost:3306/employee";

String username = "root"; // Replace with your MySQL username String password = "12345"; // Replace with your MySQL password connection = DriverManager.getConnection(url, username, password);


// Create SQL query

String sql = "SELECT * FROM employee";



// Execute query

statement = connection.createStatement(); resultSet = statement.executeQuery(sql);


// Send data to index.jsp for display request.setAttribute("resultSet", resultSet);
```

```java
request.getRequestDispatcher("index.jsp").forward(request, response);
} catch (ClassNotFoundException | SQLException e) {
// Log the exception for debugging purposes log("Error fetching employee records", e);


// Send user-friendly error message response.setContentType("text/html"); PrintWriter out = response.getWriter();

out.println("<h2>Error: Unable to fetch employee records.</h2>");

out.println("<p>Please try again later or contact the system administrator for assistance.</p>");

} finally {

// Close resources try {

if (resultSet != null) { resultSet.close();

}

if (statement != null) { statement.close();

}

if (connection != null) { connection.close();

}

} catch (SQLException e) {

    }

  }

 }

}
```

Employee Records

Click here to Fetch Employee Records from Your Employee Database

[Fetch Employees]

Employee ID	Employee Name	DOB	Address	Department	DOJ	Position
1001	Ashwani	1999-02-02	Ghaziabaad	Frontend	2021-05-01	Trainee
1002	Himanshu	1998-03-03	Delhi	Backend Developer	2020-06-01	Trainee
1003	Ajay	2001-01-15	Mumbai	Full Stack Developer	2019-03-01	Senior
1004	Tushar	2000-08-04	Banglore	HR Department	2015-03-01	Manager
1005	Sakshi	1998-08-04	chennai	Software Testing	2018-09-01	Senior

Practical-12

AIM-Create your portfolio website using LocalWP and Wordpress.

CONFIGURATIONS

#OUTPUT