

PRACTICAL ASSIGNMENT

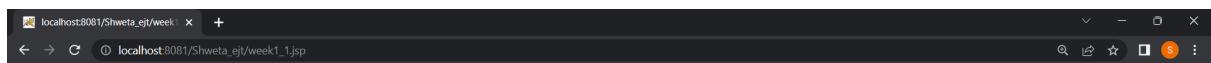
Week 1

1. Create a JSP file which will display current date and time.

JSPCode :- week1_1.jsp

```
<%@page import="java.util.*"%>
<html>
    <body>
        The Date & Time is :<%out.print(new java.util.Date());%>
    </body>
</html>
```

Output :-



The Date & Time is :Thu Nov 10 16:39:22 IST 2022



2. Take at least three parameters from user.

JSP Code :-week1_2_1.jsp

```
<html>
    <head>
        <title>Week1_2</title>
    </head>
    <%
        int tx1,tx2,ans;
        String op,clr;
        tx1=Integer.parseInt(request.getParameter("t1"));
        tx2=Integer.parseInt(request.getParameter("t2"));
        op=request.getParameter("r1");
        if(op.equals("add"))
        {
            ans=tx1+tx2;
            clr="pink";
        }
        else if(op.equals("sub"))
        {
            ans=tx1-tx2;
            clr="red";
        }
        else if(op.equals("mul"))
        {
            ans=tx1*tx2;
            clr="blue";
        }
        else
        {
            ans=tx1/tx2;
            clr="orange";
        }
    %>

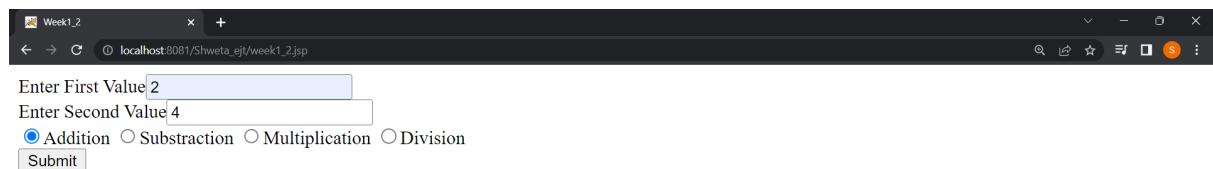
    <%=tx1%>
    <%=op%>
    <%=tx2%>
    <%=ans%>

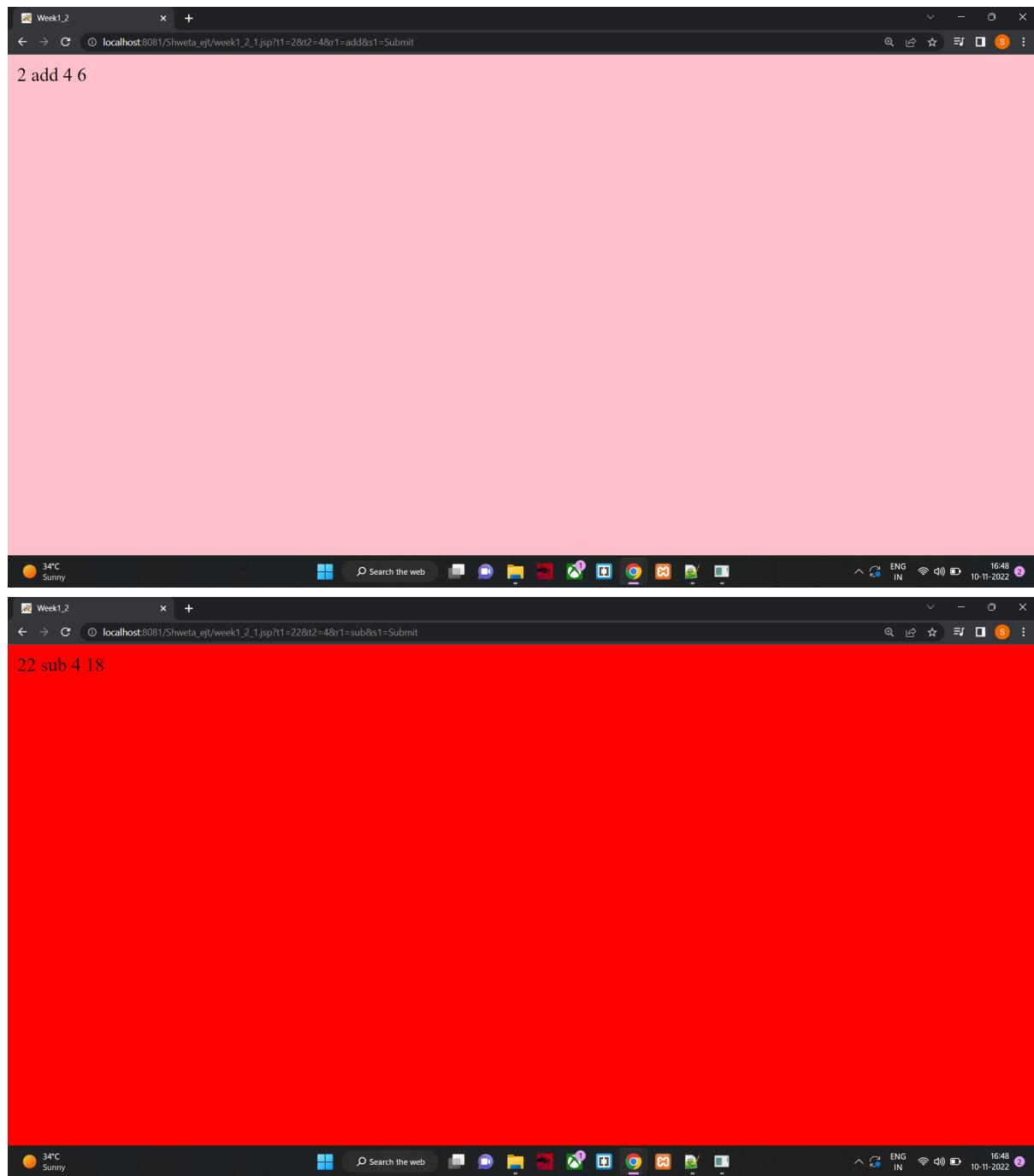
    <body bgcolor=<%=clr%>>
</html>
```

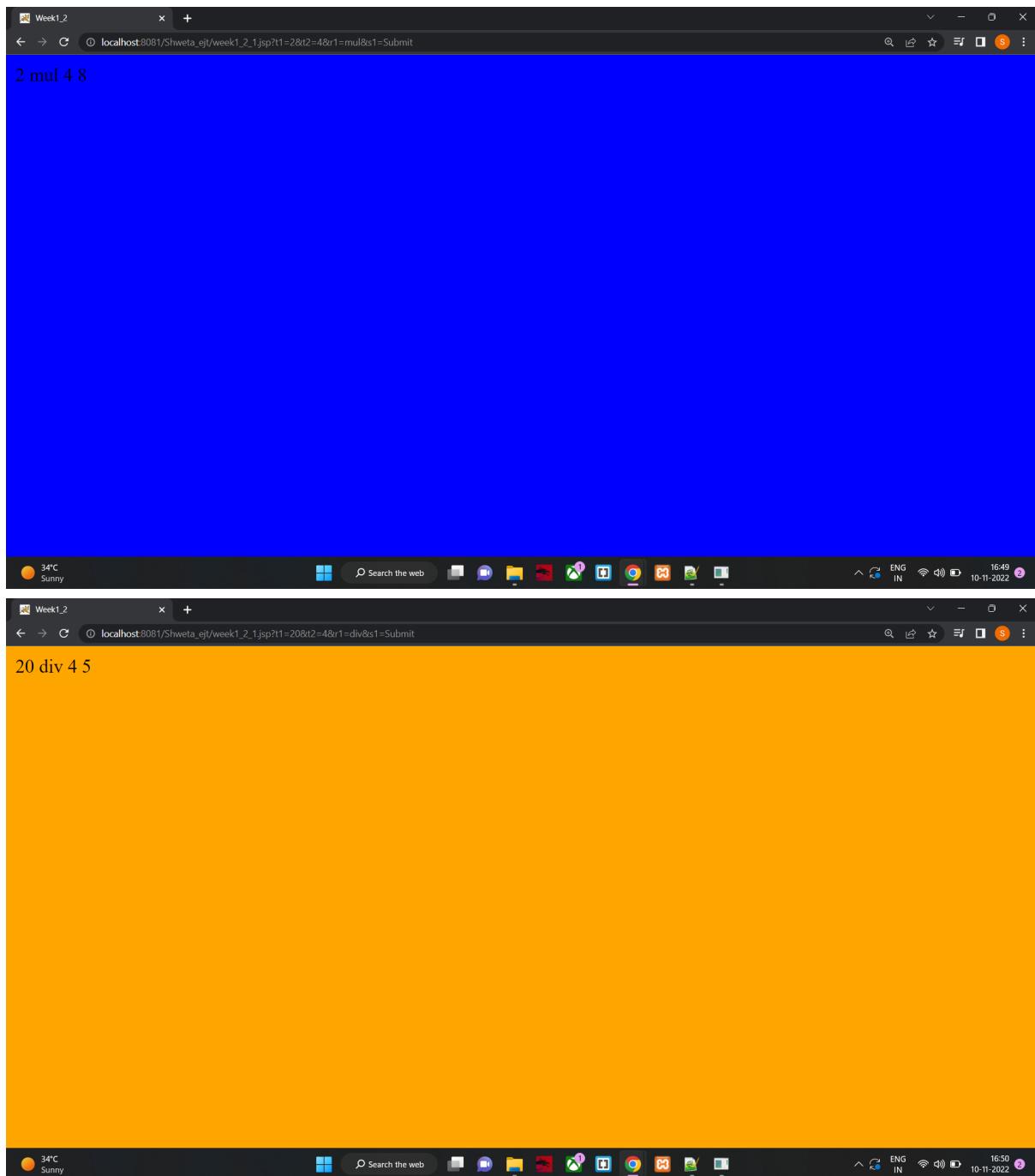
Html Code :-week1_2.jsp

```
<html>
    <head>
        <title>Week1_2</title>
    </head>
    <body>
        <form name="f1" method="get" action="week1_2_1.jsp">
            Enter First Value<input type="text" name="t1"><br>
            Enter Second Value<input type="text" name="t2"><br>
            <input type="radio" name="r1" value="add">Addition
            <input type="radio" name="r1" value="sub">Substraction
            <input type="radio" name="r1" value="mul">Multiplication
            <input type="radio" name="r1" value="div">Division<br>
            <input type="submit" name="s1">
        </form>
    </body>
</html>
```

Output :-







3. Create a JSP file which will take user name from parameter passed. If No parameter passed then print “Hello World”.

Html Code :-week1_3.jsp

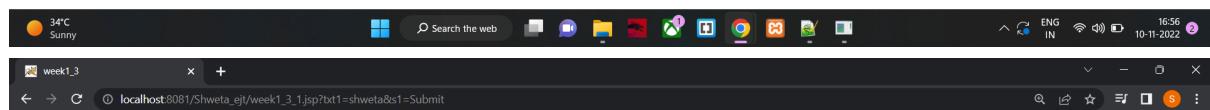
```
<html>
    <head>
        <title>week1_3</title>
    </head>
    <body>
        <form name="f1" method="get" action="week1_3_1.jsp">
            Enter Username:-<input type="text" name="txt1"><br>
            <input type="submit" name="s1">
        </form>
    </body>
</html>
```

JSP Code :-week1_3_1.jsp

```
<html>
    <head>
        <title>week1_3</title>
        <%
            String a=request.getParameter("txt1");
            String unm;
            if(a==null)
            {
                unm="Indus University";
            }
            else
            {
                unm=a;
            }
        %>
        <%=unm%>
    </head>
</html>
```

Output :-

A screenshot of a web browser window titled "week1_3". The address bar shows "localhost:8081/Shweta_ejt/week1_3.jsp". The page contains a form with a label "Enter Username:-" followed by an input field containing "shweta" and a "Submit" button.



shweta



4. Create a JSP file which will take bgcolor as parameter from user and if none is passed then bgcolor will be set as RED.

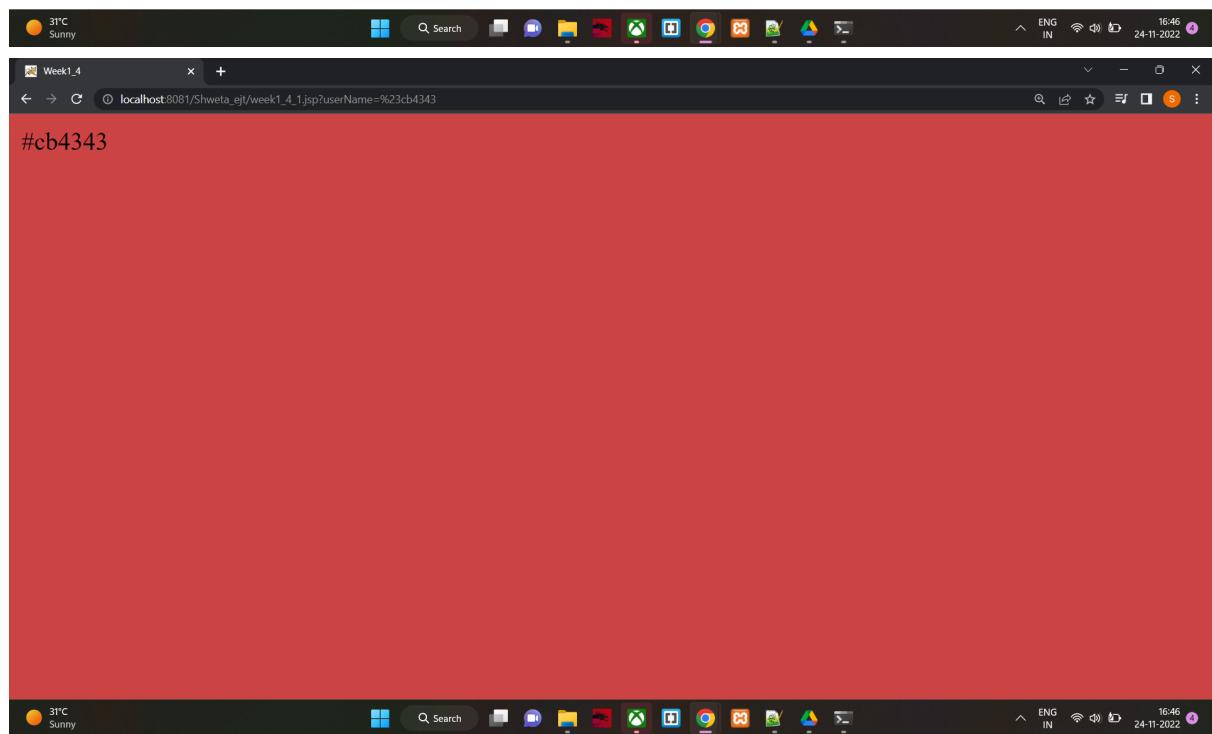
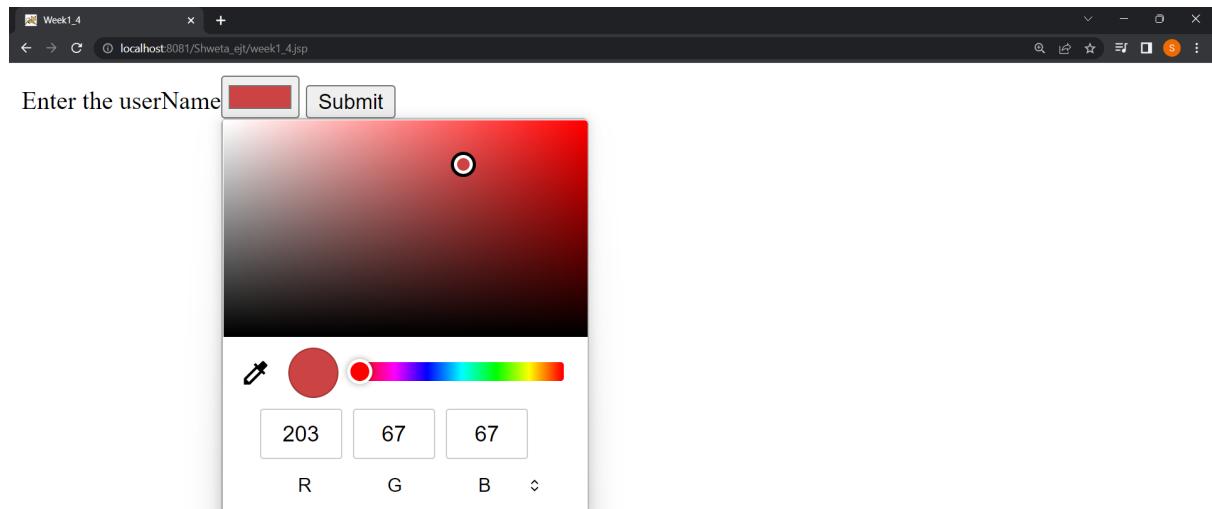
JSP Code :-week1_4.jsp

```
<html>
    <head>
        <title>Week1_4</title>
    </head>
    <body>
        <form method="get" action="week1_4_1.jsp">
            Enter the userName<input type="color" name="userName"/>
            <input type="submit" value="Submit"/>
        </form>
    </body>
</html>
```

week1_4_1.jsp

```
<html>
    <head>
        <title>Week1_4</title>
    </head>
    <%
        String user1=request.getParameter("userName");
        String color;
        if(user1 == null)
        {
            color="RED";
        }
        else
        {
            color=user1;
        }
    %>
    <body bgcolor=<% out.println(color);%>>
    <%=user1 %>
</body>
</html>
```

Output :-



5. Write a JSP snippet which prints the number of times the current page has been requested since the server was booted.

JSP Code :-week1_5.jsp

```
<html>
    <head>
        <title>Week1_5</title>
    </head>
    <%! private int accesscount=0; %>
    Access to page since server booted is:<%= ++accesscount%>

    <%     int accesscnt=0;%>
    <br/>Without Declaration:<%= ++accesscnt%>
</html>
```

Output :-



Access to page since server booted is:12

Without Declaration:1



**6. Create a Method which will show the addition of two numbers.
(Numbers are static in code)**

JSP Code :-week1_6.jsp

```
<html>
    <head>
        <title>Week1_6</title>
    </head>
    <%!
        public static int total(int a, int b)
        {
            return(a+b);
        }
    %>
    <%
        int sum=total(5,3);
        out.println("Additional of Two Number:-"+sum);
    %>
</html>
```

Output :-



Additional of Two Number:-8



Week 2

1. Make a JSP page that lets the user supply a request parameter indicating the back-ground color. If no parameter is supplied, a background color should be selected at random.

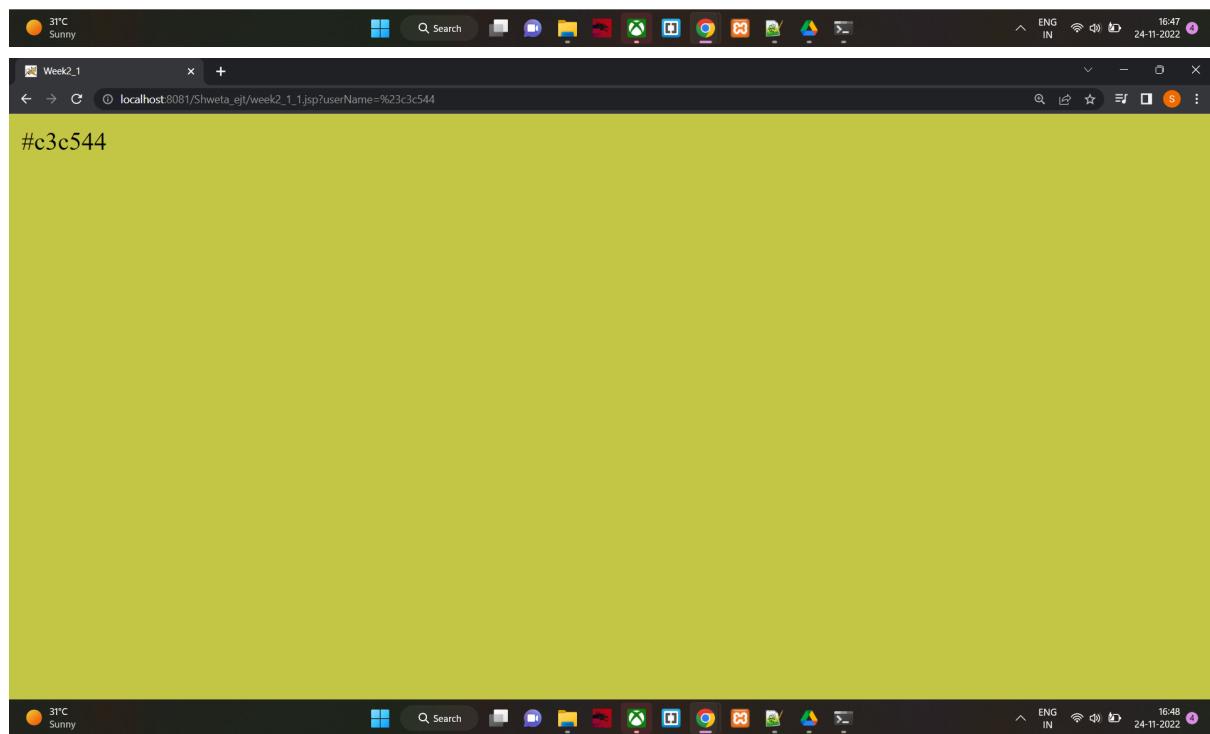
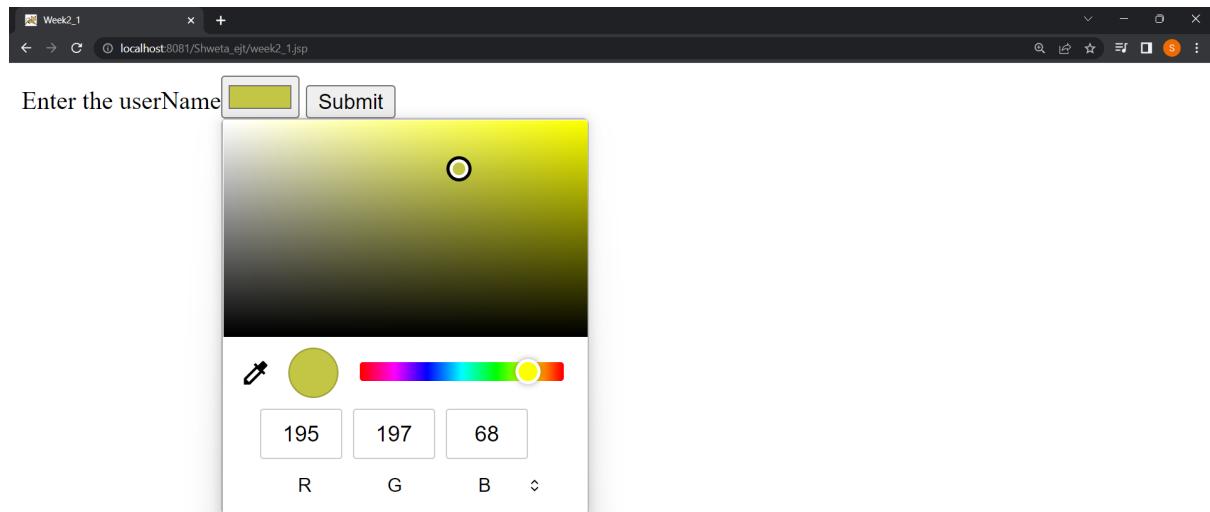
JSP Code :-week2_1.jsp

```
<html>
  <head>
    <title>Week2_1</title>
  </head>
  <body>
    <form method="get" action="week2_1_1.jsp">
      Enter the userName<input type="color" name="userName"/>
      <input type="submit" value="Submit"/>
    </form>
  </body>
</html>
```

week2_1_1.jsp

```
<html>
  <head>
    <title>Week2_1</title>
  </head>
  <%
    String user1=request.getParameter("userName");
    String color;
    if(user1 == null)
    {
      color="RED";
    }
    else
    {
      color=user1;
    }
  %>
  <body bgcolor=<% out.println(color);%>>
    <%=user1 %>
  </body>
</html>
```

Output :-



2. Write a JSP file which will greet the day on random basis.

JSP Code :-week2_2.jsp

```
<html>
    <head>
        <title>Week2_2</title>
    </head>
    <%
        Double da=Math.random();
        if(da<0.5)
        {
            out.println(da+"<br>");
            out.println("Have a good day");
        }
        else
        {
            out.println(da+"<br>");
            out.println("It was a bad day");
        }
    %>
</html>
```

Output :-



3. Create an application which will show any random number between 1 and 10 (Make proper use of import tag)

JSP Code :-week2_3.jsp

```
<%@ page import="java.util.*" %>
<html>
    <body>
        <%
            Random r = new Random();
            int a=r.nextInt(10);
            out.println("Random number is =" +a);
        %
        </body>
</html>
```

Output :-



Random number is = 4



4. Generate a simple Excel Spreadsheet from JSP.

JSP Code :-week2_4.jsp

```
SN0 NAME SURNAME
1 Shweta Chodvadiya
5 Nikunj Dobariya
10 Shivani Patel
15 Bhavik Pokar
20 Teerth Vaghasiya
```

```
<%
```

```
    response.setContentType("application/vnd.ms-excel");
    response.setHeader("Content-Disposition", "attachment; filename=Week2_4_1.xls");
```

```
%>
```

Output :-

The screenshot shows a Microsoft Excel window titled "Week2_4_1 - Excel (Unlicensed Product)". The spreadsheet contains the following data:

SNO	NAME	SURNAME
1	Shweta	Chodvadiya
5	Nikunj	Dobariya
10	Shivani	Patel
15	Bhavik	Pokar
20	Teerth	Vaghasiya

The Excel interface includes a ribbon bar with tabs like Home, Insert, Page Layout, Formulas, Data, Review, View, and Help. The status bar at the bottom shows the date as 10-11-2022 and the time as 17:15.

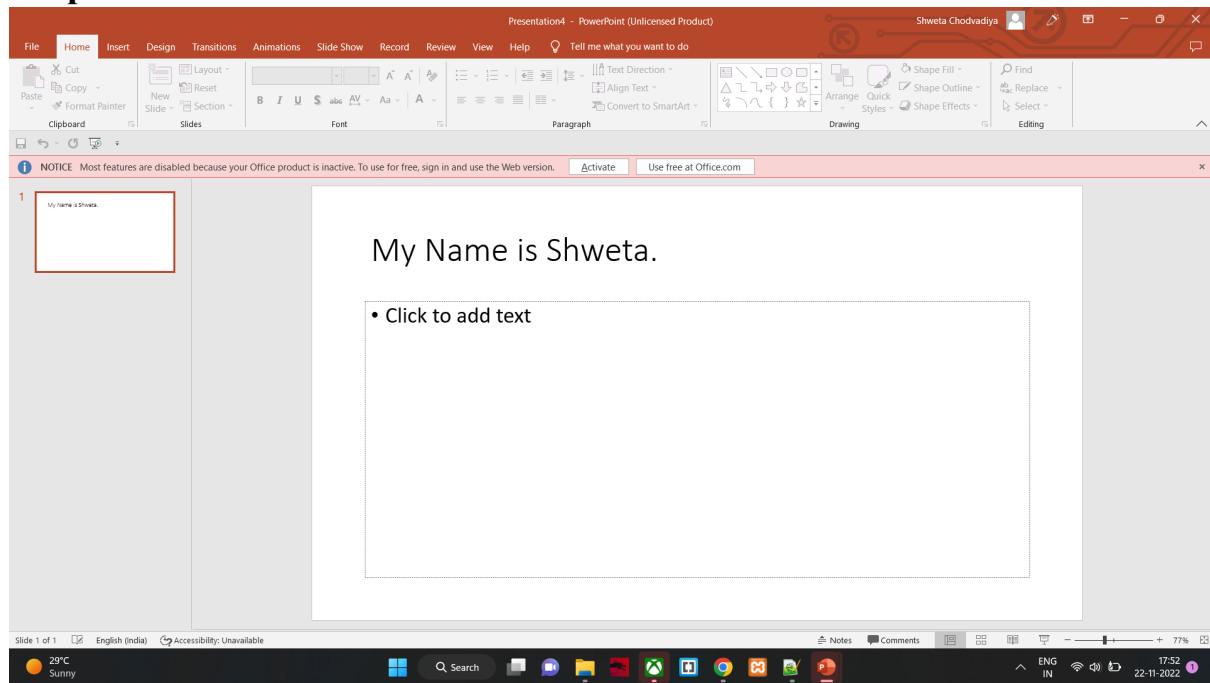
5. Generate a simple PowerPoint Presentation from JSP.

JSP Code :-week2_5.jsp

My Name is Shweta.

```
<%  
    response.setContentType("application/vnd.ppt");  
    response.setHeader("Content-Disposition","attachment; filename=Week2_5_1.ppt");  
%>
```

Output :-



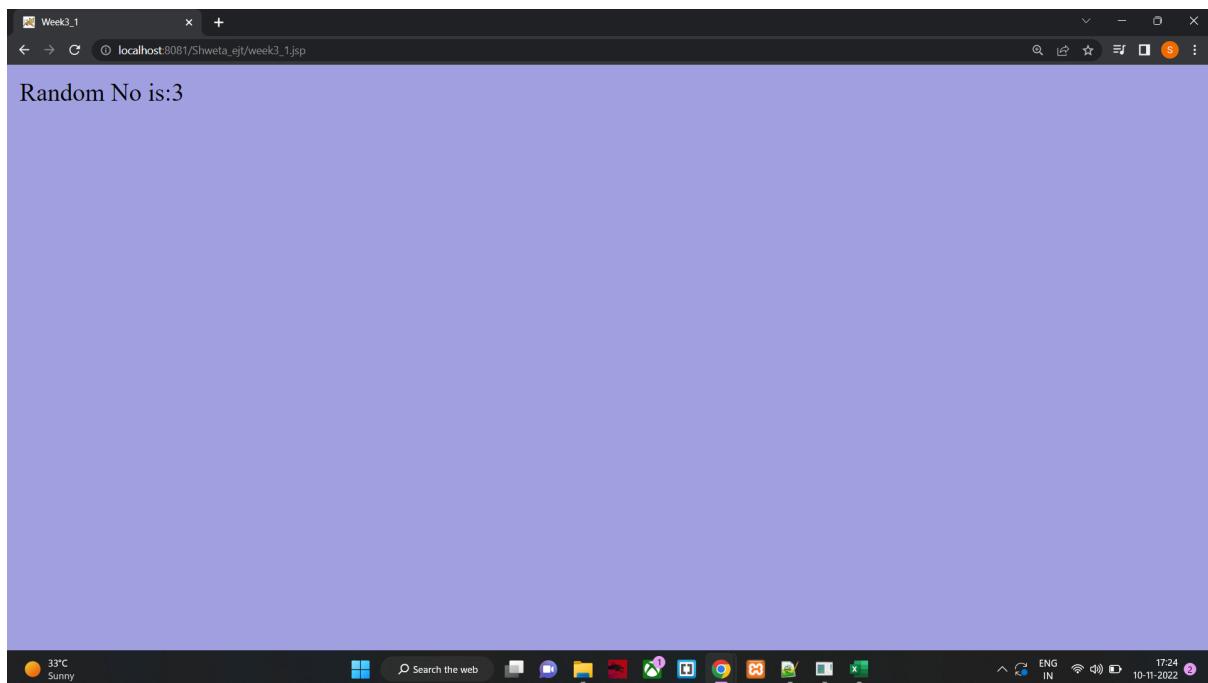
Week 3

1. Make a JSP page that randomly selects a background color for each request. Just choose at random among a small set of predefined colors.

JSP Code :-week3_1.jsp

```
<%  
    String str[] = new String[5];  
    str[0] = "Yellow";  
    str[1] = "Green";  
    str[2] = "floral";  
    str[3] = "aquaries";  
    str[4] = "coral";  
  
    int n = (int)(Math.random() * 5);  
%>  
<html>  
    <head>  
        <title>Week3_1</title>  
    </head>  
    <body bgcolor="<% = str[n] %>">  
        <p>Random No is: <% = n %></p>  
    </body>  
</html>
```

Output :-



2. Use JSP to make an Excel spreadsheet where the first row says “Year,” “Apples,” and “Oranges.” It should then have two rows of data (2008, 2009, 2010), where each entry is a random number between 0 and 10. I.e. the result should look something like this:

Year	Apples	Oranges
2008	9.23456	3.98765
2009	4.45678	2.223344
2010	7.33544	8.453543

JSP Code :-week3_2.jsp

```
<html>
    <head>
        <title>week3_2</title>
    </head>
    <body>
        <table border="1">
            <tr>
                <th>Year</th>
                <th>Apples</th>
                <th>Orange</th>
            </tr>
            <tr>
                <td>2008</td>
                <td><%= Math.random()*10 %></td>
                <td><%= Math.random()*10 %></td>
            </tr>
            <tr>
                <td>2009</td>
                <td><%= Math.random()*10 %></td>
                <td><%= Math.random()*10 %></td>
            </tr>
            <tr>
                <td>2010</td>
                <td><%= Math.random()*10 %></td>
                <td><%= Math.random()*10 %></td>
            </tr>
        </table>
    </body>
</html>
```

Output :-

Year	Apples	Orange
2008	8.57585453530006	0.6720730468654512
2009	3.9101463386949566	4.253090215496222
2010	5.47957495173163	8.934192155085455



6. Create a JSP file which will take number from the user in textbox and divide the number by 5. If any error occurs while performing divisions, display the ErrorPage for the same.

Html Code :-week3_6.html

```
<html>
    <body>
        <form action="week3_6_1.jsp" method="get">
            Enter the number :- <input type="text" name="num"/><br>
            <input type="submit" value="Submit"/>
        </form>
    </body>
</html>
```

JSP Code :-week3_6_1.jsp

Error Page :-

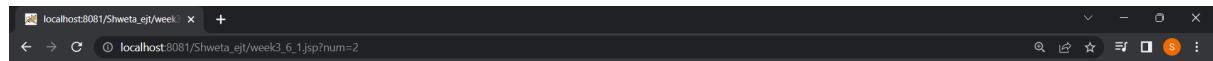
```
<%@ page errorPage="week3_6_2.jsp" %>
<%
    int number=Integer.parseInt(request.getParameter("num"));
    double abc=5/number;
    out.println(abc);
%>
```

IsError Page :-week3_6_2.jsp

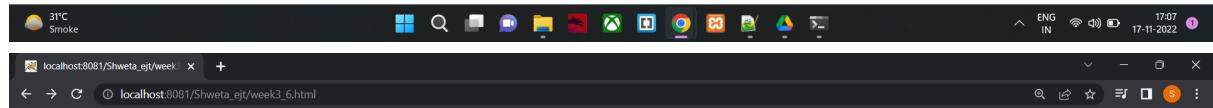
```
<%@ page isErrorPage="true" %>
<h1>Error</h1>
```

Output :-



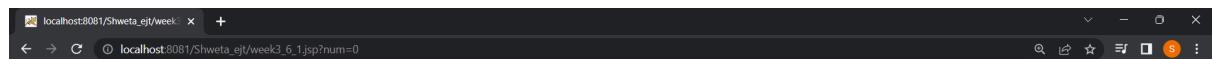


2.0



Enter the number :-





Error



Week 6

1. Write a Servlet to display “Hello World” on browser using
 - o plain Text
 - o HTML

Java code :-

```
import java.io.*;  
import javax.servlet.*;  
import javax.servlet.http.*;  
  
public class week6_1 extends HttpServlet  
{  
    public void doGet(HttpServletRequest request,HttpServletResponse response)  
    throws ServletException, IOException  
    {  
        PrintWriter out=response.getWriter();  
        response.setContentType("text/html");  
        out.println("Hello World!!");  
    }  
}
```

Output :-



Hello World!!

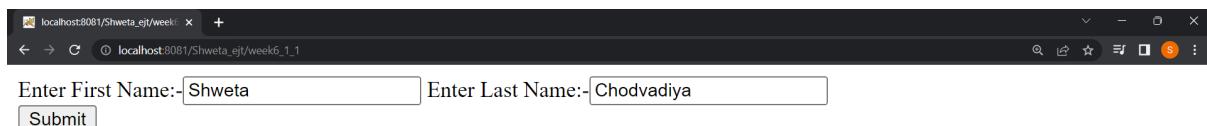


Java code :-

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;

public class week6_1_1 extends HttpServlet
{
    public void doGet(HttpServletRequest request,HttpServletResponse response)
    throws ServletException, IOException
    {
        PrintWriter out=response.getWriter();
        response.setContentType("text/html");
        out.println("Enter First Name:-<input type='text' name='t1'>");
        out.println("Enter Last Name:-<input type='text' name='t2'>");
        out.println("<br><input type='submit' name='submit'>");
    }
}
```

Output :-



2. Create a servlet that makes a bulleted list of four random numbers.

Java code:-

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.util.Random;

public class week6_2 extends HttpServlet
{
    public void doGet (HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException
    {
        Random r=new Random();
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        for(int i=0; i<4; i++)
        {
            int a=r.nextInt(10);
            out.println("<ul><li> Random Generated Number " +(i+1)+" is =
"+a+"</li></ul>");
        }
    }
}
```

Output :-



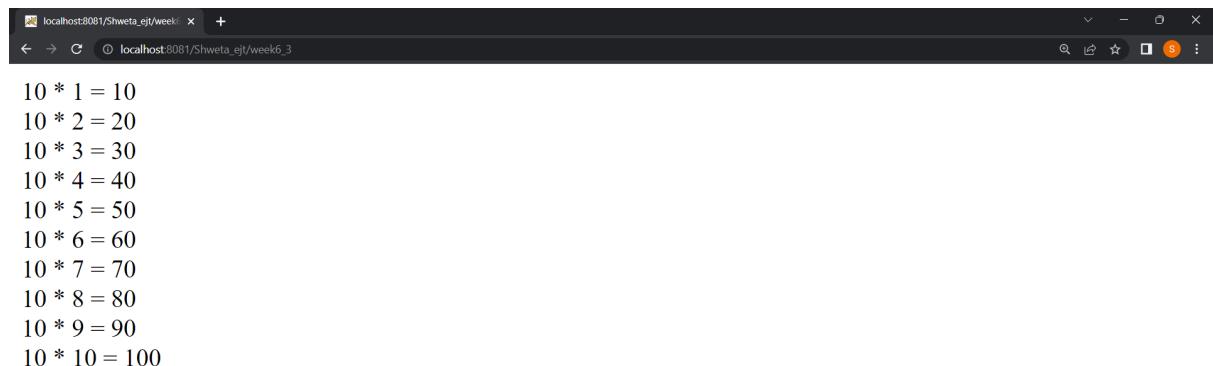
3. Create a servlet that uses a loop to output an HTML table with 10 rows and 10 columns.

Java code:

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;

public class week6_3 extends HttpServlet
{
    public void doGet (HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException
    {
        PrintWriter out = response.getWriter();
        response.setContentType("text/html");
        for(int i=1; i<=10;i++)
        {
            out.println("<tr>");
            out.println("<td> 10 * "+i+" = "+(10*i)+"</td><br>");
            out.println("</tr>");
        }
    }
}
```

Output :-



```
10 * 1 = 10
10 * 2 = 20
10 * 3 = 30
10 * 4 = 40
10 * 5 = 50
10 * 6 = 60
10 * 7 = 70
10 * 8 = 80
10 * 9 = 90
10 * 10 = 100
```



4. Create a servlet which read Three Parameters provided by user in html file.

Html code :-

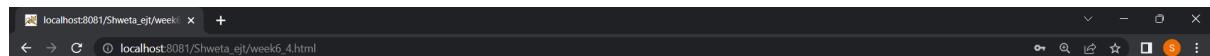
```
<html>
    <form action="week6_4">
        Email : - <input type="text" name="email"/><br>
        Password : - <input type="password" name="password"/><br>
        <input type="submit" value="Submit"/>
    </form>
</html>
```

Java code :-

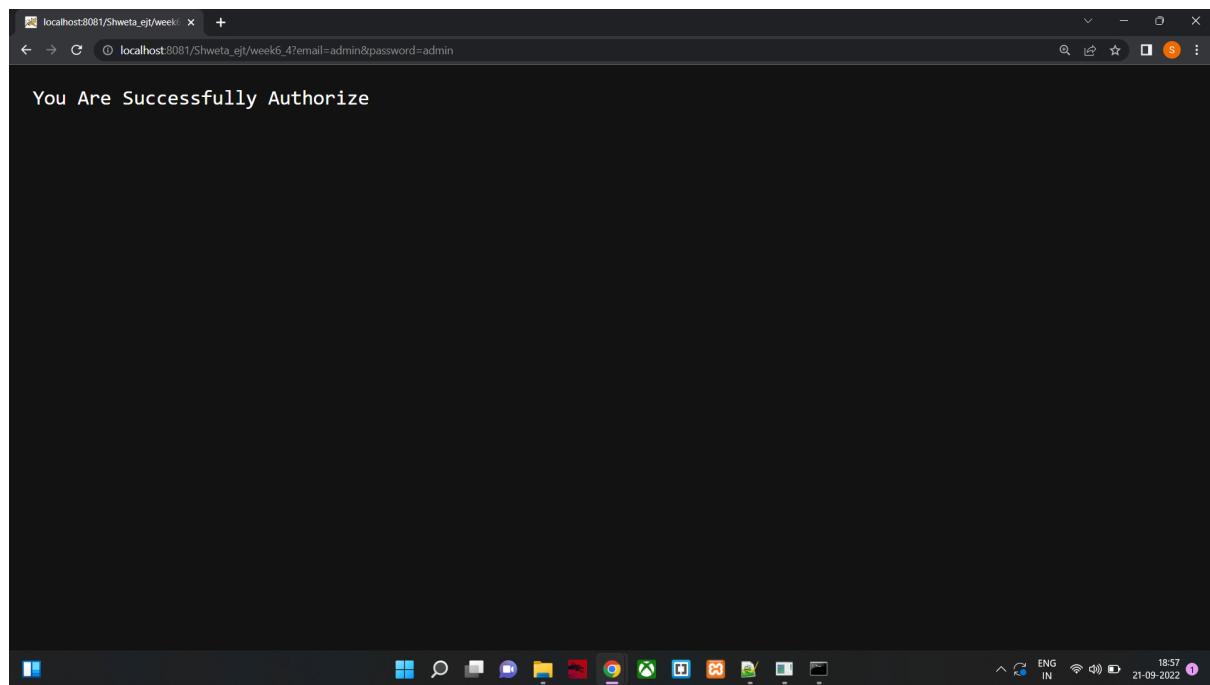
```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;

public class week6_4 extends HttpServlet
{
    public void doGet(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException
    {
        PrintWriter out = response.getWriter();
        //response.setContentType("html/text");
        String email=request.getParameter("email");
        String password=request.getParameter("password");
        if(email.equals("admin") && password.equals("admin"))
        {
            out.println(" You Are Successfully Authorize ");
        }
        else
        {
            out.println(" You are not Authorize");
        }
    }
}
```

Output :-



Email : -
Password : -



You Are Successfully Authorize

5. Develop a Servlet application that match user no with the number which are randomly generated by the Servlet. If both number matches, it should be displayed in BOLD. (Use Init() Method of Servlet to generate Random Number)

Html code :-

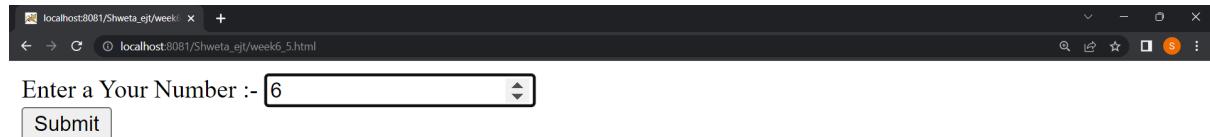
```
<html>
    <body>
        <form action="week6_5">
            Enter a Your Number :- <input type="number" name="num"><br>
            <input type="submit" value="Submit">
        </form>
    </body>
</html>
```

Java code :-

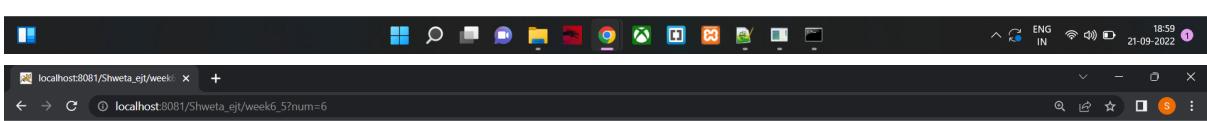
```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.util.Random;

public class week6_5 extends HttpServlet
{
    public void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException
    {
        Random r=new Random();
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        int no=Integer.parseInt(request.getParameter("num"));
        int a=r.nextInt(10);
        if(no==a)
        {
            out.println(" Both Number Are Same ");
        }
        else
        {
            out.println(" Both Number are Not Same ");
        }
    }
}
```

Output :-



A screenshot of a web browser window. The address bar shows "localhost:8081/Shweta_ejt/week6_5.html". The page contains a form with the text "Enter a Your Number :-" followed by an input field containing the number "6", and a "Submit" button below it.



Week 7

1. Create a servlet that prints three components of the main request line.

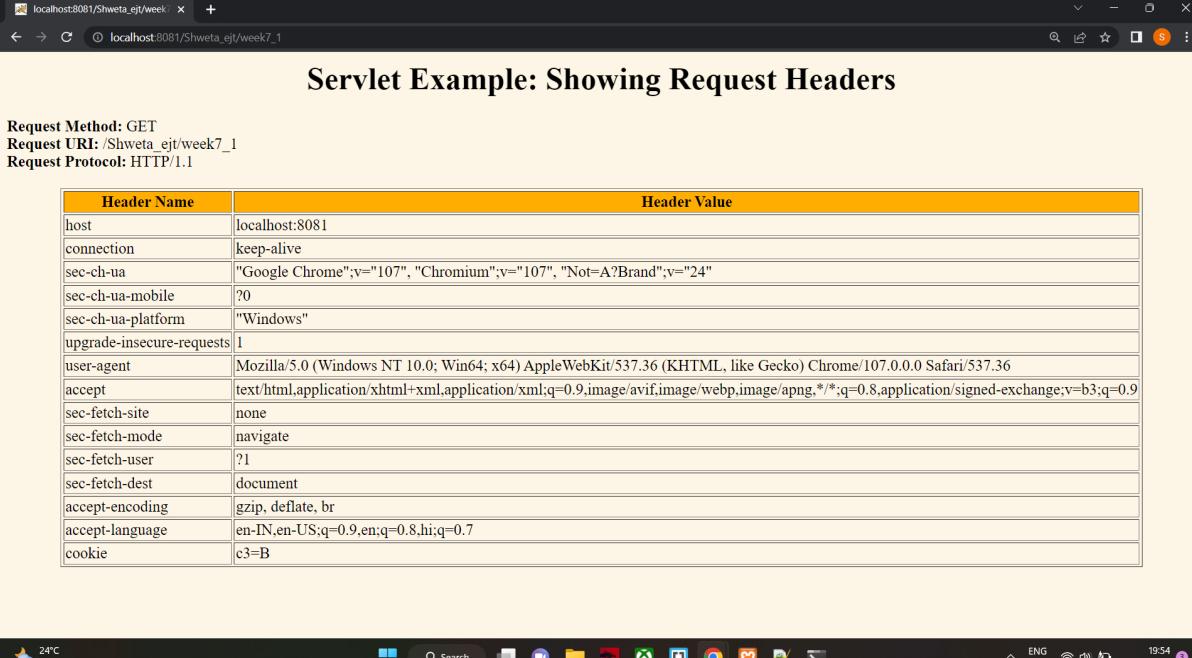
Java Code :-

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.util.*;

public class week7_1 extends HttpServlet
{
    public void doGet(HttpServletRequest request,HttpServletResponse response)
    throws ServletException, IOException
    {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        String title = "Servlet Example: Showing Request Headers";
        out.println(/*ServletUtilities.headWithTitle(title) +*/
        "<BODY BGCOLOR=\"#FDF5E6\">\n" +
        "<H1 ALIGN= CENTER>" + title + "</H1>\n" +
        "<B>Request Method: </B>" +
        request.getMethod() + "<BR>\n" +
        "<B>Request URI: </B>" +
        request.getRequestURI() + "<BR>\n" +
        "<B>Request Protocol: </B>" +
        request.getProtocol() + "<BR><BR>\n" +
        "<TABLE BORDER=1 ALIGN= CENTER>\n" +
        "<TR BGCOLOR=\"#FFAD00\">\n" +
        "<TH>Header Name<TH>Header Value");
        Enumeration headerNames = request.getHeaderNames();
        while(headerNames.hasMoreElements())
        {
            String headerName = (String)headerNames.nextElement();
            out.println("<TR><TD>" + headerName);
            out.println("  <TD>" + request.getHeader(headerName));
        }
        out.println("</TABLE>\n</BODY></HTML>");
    }

    public void doPost(HttpServletRequest request,HttpServletResponse response)
    throws ServletException, IOException
    {
        doGet(request, response);
    }
}
```

Output :-



The screenshot shows a web browser window with the URL `localhost:8081/Shweta_ejt/week7_1`. The title bar reads "Servlet Example: Showing Request Headers". Below the title, it displays the following information:

Request Method: GET
Request URI: /Shweta_ejt/week7_1
Request Protocol: HTTP/1.1

Header Name	Header Value
host	localhost:8081
connection	keep-alive
sec-ch-ua	"Google Chrome";v="107", "Chromium";v="107", "Not=A?Brand";v="24"
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/107.0.0.0 Safari/537.36
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=0.9
sec-fetch-site	none
sec-fetch-mode	navigate
sec-fetch-user	?1
sec-fetch-dest	document
accept-encoding	gzip, deflate, br
accept-language	en-IN,en-US;q=0.9,en;q=0.8,hi;q=0.7
cookie	c3=B

The taskbar at the bottom of the screen shows various application icons and system status indicators.

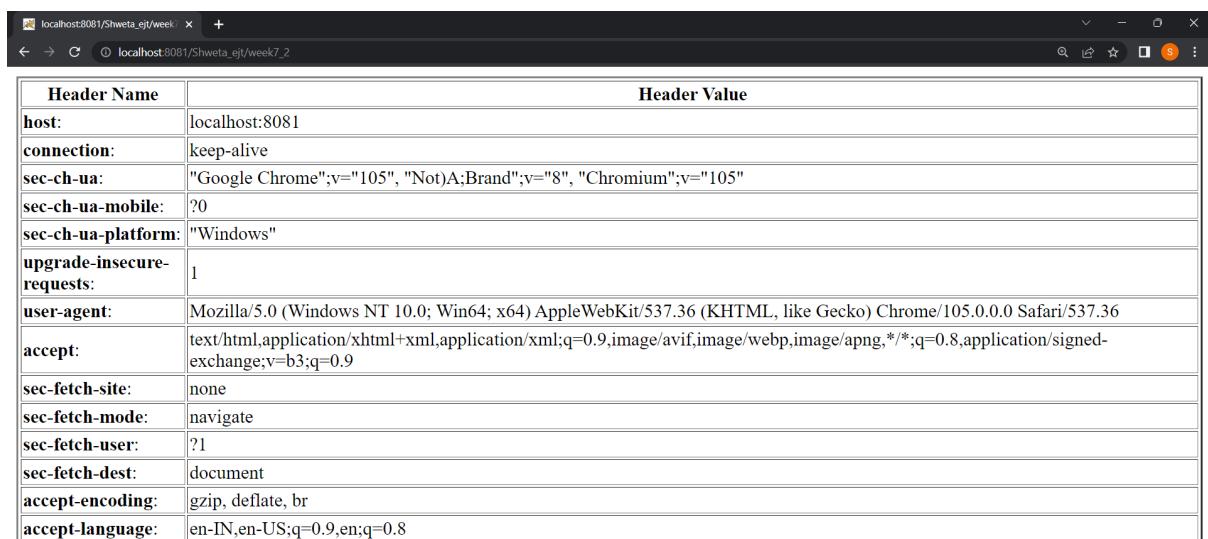
2. Create a servlet that simply creates a table of all the headers it receives, along with their associated values.

Java code :-

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.util.*;

public class week7_2 extends HttpServlet
{
    public void doGet (HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException
    {
        PrintWriter out = response.getWriter();
        out.println("<Table border=2><tr><th> Header Name<th>Header Value");
        Enumeration enum1=request.getHeaderNames();
        while(enum1.hasMoreElements())
        {
            String headerName=(String) enum1.nextElement();
            String headerValue=request.getHeader(headerName);
            out.print("<tr><td><b>" +headerName+ "</b>:</td>");
            out.println("<td>" +headerValue+ "</td></tr>");
        }
    }
}
```

Output :-



Header Name	Header Value
host:	localhost:8081
connection:	keep-alive
sec-ch-ua:	"Google Chrome";v="105", "NotA;Brand";v="8", "Chromium";v="105"
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/105.0.0.0 Safari/537.36
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=0.9
sec-fetch-site:	none
sec-fetch-mode:	navigate
sec-fetch-user:	?1
sec-fetch-dest:	document
accept-encoding:	gzip, deflate, br
accept-language:	en-IN,en-US;q=0.9,en;q=0.8



3. Create two pages. The first page should be a normal HTML page with a link to the second page which should be a servlet. If a user accesses the first page and then follows the link to the second page, it works normally. But, if the user directly types in the address of the second page (or follows a link from a page with a different name than the first page), they should get sent back to the first page automatically (Hint: Use response.sendRedirect to send users back to first page)

Html code :-

```
<html>
    <body>
        <a href="week7_3">click here...</a>
    </body>
</html>
```

Java code :-

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.util.*;

public class week7_3 extends HttpServlet
{
    public void doGet (HttpServletRequest request,HttpServletResponse response)
        throws ServletException, IOException
    {
        PrintWriter out=response.getWriter();
        response.setContentType("text/html");
        String st="week7_3.html";
        String ref=request.getHeader("Referer");
        if(ref==null || (!ref.contains(st)))
        {
            response.sendRedirect("/Shweta_ejt/week7_3.html");
        }
        else
        {
            out.println("welcome...");
        }
    }
}
```

Output :-



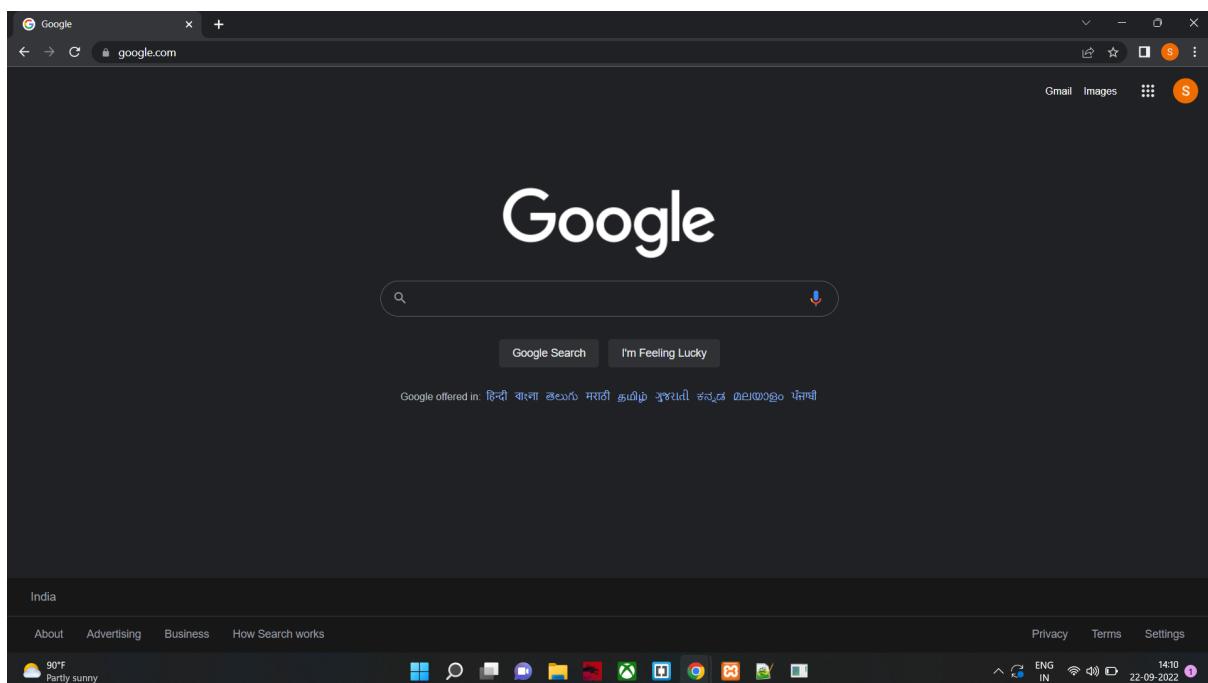
4. Create a servlet that send Internet Explorer users to the Netscape home page, and all other users to the Microsoft home page.

Java code :-

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.util.*;

public class week7_4 extends HttpServlet
{
    public void doGet(HttpServletRequest request,HttpServletResponse response)
    throws ServletException,IOException
    {
        PrintWriter out=response.getWriter();
        String UA=request.getHeader("User-Agent");
        if(UA.contains("Chrome"))
        {
            response.sendRedirect("http://www.google.com/");
        }
        else
        {
            response.sendRedirect("http://www.microsoft.com/");
        }
    }
}
```

Output :-



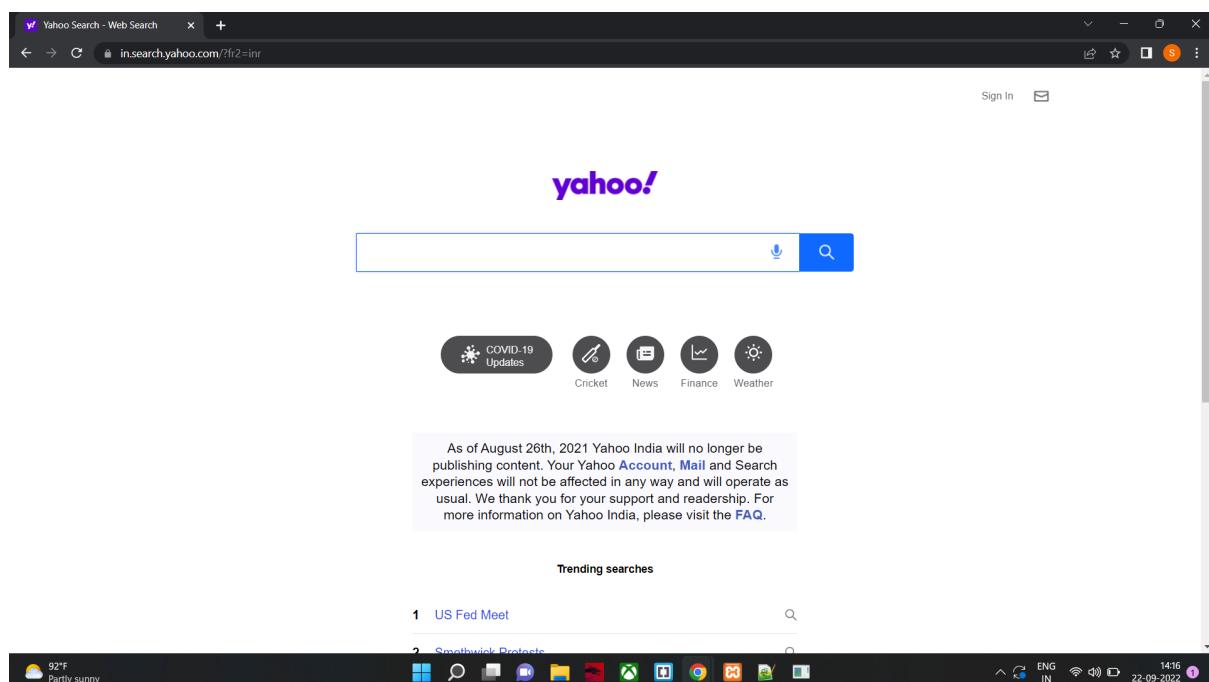
5. Write a servlet that sends about half the users to <http://www.google.com> and about half to <http://www.yahoo.com>. Choose at random

Java code :-

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.util.*;

public class week7_5 extends HttpServlet
{
    public void doGet(HttpServletRequest request , HttpServletResponse response)
    throws ServletException , IOException
    {
        Random r=new Random();
        PrintWriter out=response.getWriter();
        response.setContentType("text/html");
        double ran = Math.random()*10;
        if(ran>5)
        {
            response.sendRedirect("http://www.google.com/");
        }
        else
        {
            response.sendRedirect("https://in.yahoo.com/");
        }
    }
}
```

Output :-



Week 8

1. Develop a Servlet application that redirect the page based on the username & password provided by the user. If password and user-id match with the user-id & password stored in the text file, display the welcome user page or display error page.

Java code :-

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.util.*;

public class week8_1 extends HttpServlet
{
    public void doGet (HttpServletRequest request,HttpServletResponse response)
        throws ServletException, IOException
    {
        PrintWriter out=response.getWriter();
        String str1=request.getParameter("t1");
        String str2=request.getParameter("p1");

        FileReader fr = new FileReader("C:/Program Files/Apache 9.0/ webapps/
Shweta_ejt/WEB-INF/classes/week8_1.txt");
        BufferedReader br = new BufferedReader(fr);

        String s = br.readLine();
        String s1 = br.readLine();

        if(s.equals(str1) && s1.equals(str2))
        {
            out.println("Welcome");
        }
        else
        {
            response.sendRedirect("/Shweta_ejt/week8_1.html");
        }
    }
}
```

Html code :-

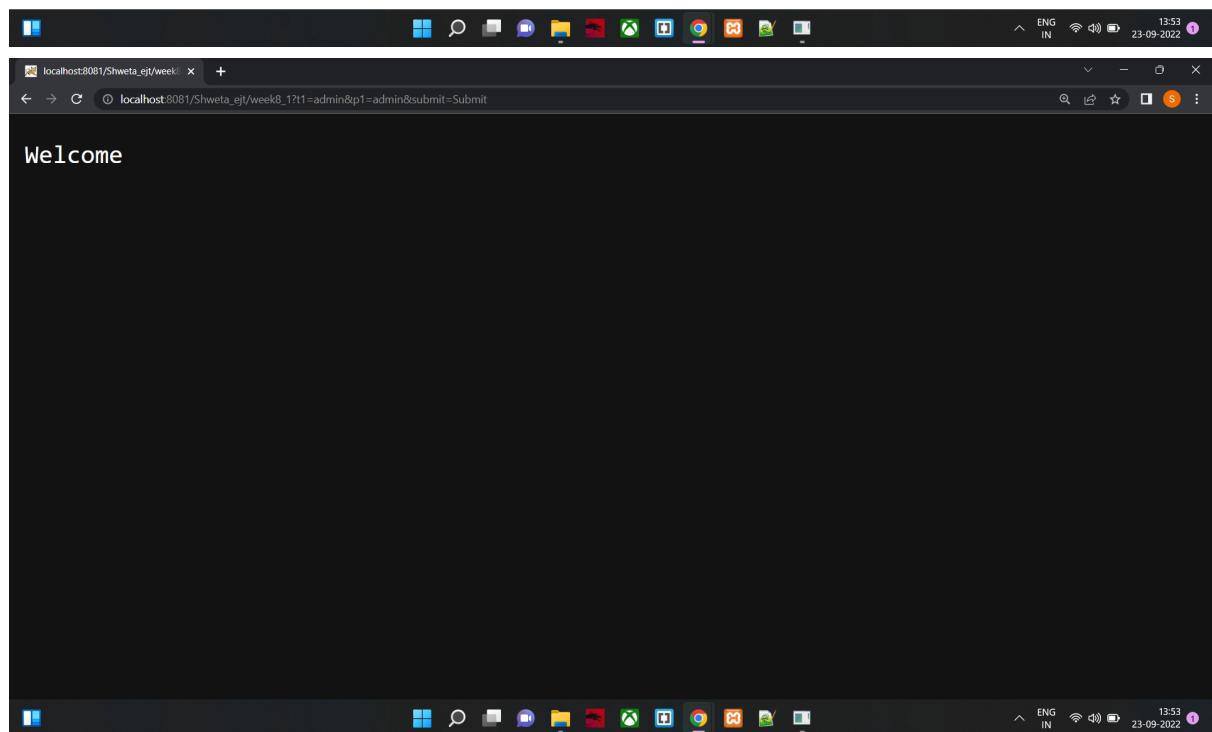
```
<html>
    <body>
        <form action="week8_1">
            Name: <input type="text" name="t1"><br>
            Password: <input type="password" name="p1"><br>
            <input type="submit" name="submit">
        </form>
    </body>
</html>
```

Txt File :-

admin
Admin

Output :-

A screenshot of a web browser window. The address bar shows "localhost:8081/Shweta_ejt/week8_1.html". The page contains a form with two text input fields and a submit button. The first field is labeled "Name:" and contains "admin". The second field is labeled "Password:" and contains ".....". Below the fields is a "Submit" button.



2. Develop a Servlet application that passes the control to the page that user passed in the parameter in the html file.

Html code :-

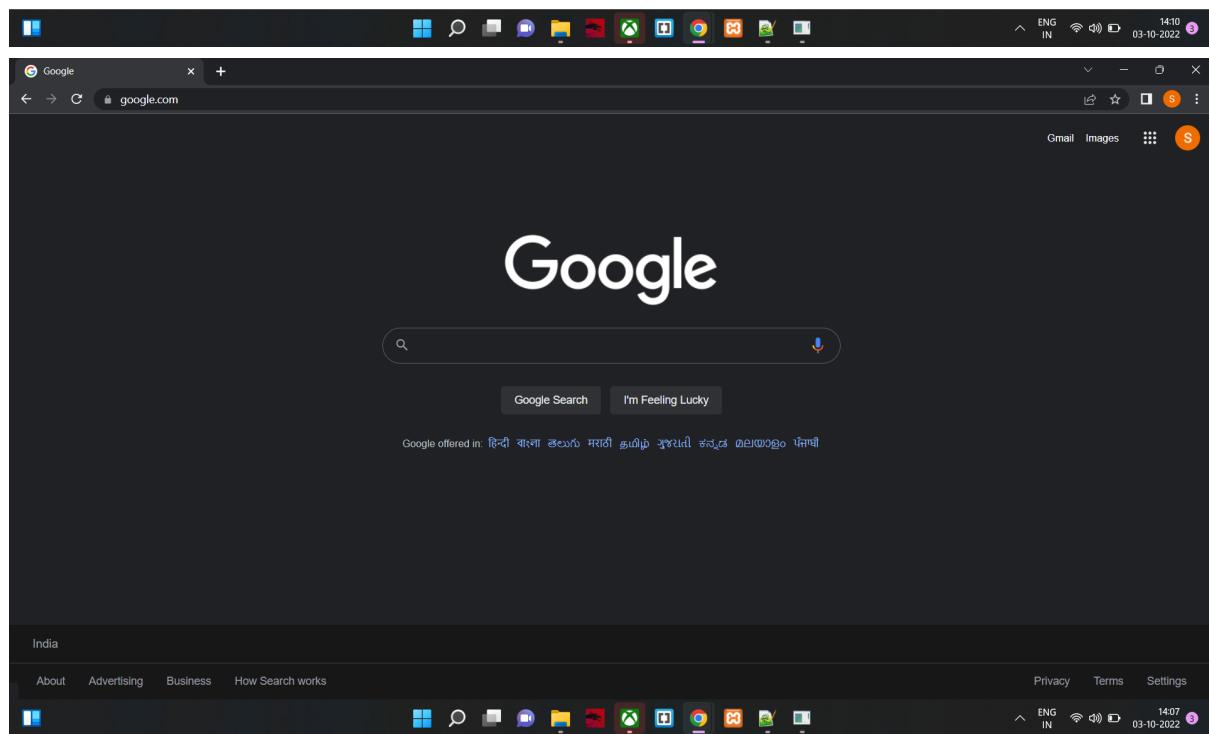
```
<html>
    <body>
        <form action="week8_2">
            Website <input type="text" name="t1"><br>
            <input type="submit" name="submit">
        </form>
    </body>
</html>
```

Java code :-

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.util.*;

public class week8_2 extends HttpServlet
{
    public void doGet (HttpServletRequest request,HttpServletResponse response)
        throws ServletException, IOException
    {
        PrintWriter out=response.getWriter();
        String str = request.getParameter("t1");
        String s1 = "http://" + str;
        response.sendRedirect(s1);
    }
}
```

Output :-



3. Write a servlet that instructs the browser to reconnect every five seconds. Display the time on each connection.

Java code :-

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.util.*;

public class week8_3 extends HttpServlet
{
    public void doGet (HttpServletRequest request,HttpServletResponse response)
    throws ServletException,IOException
    {
        PrintWriter out=response.getWriter();
        response.setContentType("text/html");

        Date dt = new Date();
        response.setIntHeader("Refresh",5);

        int h = dt.getHours();
        int m = dt.getMinutes();
        int s = dt.getSeconds();

        out.println(h);
        out.println(m);
        out.println(s);
    }
}
```

Output :-



14 22 54



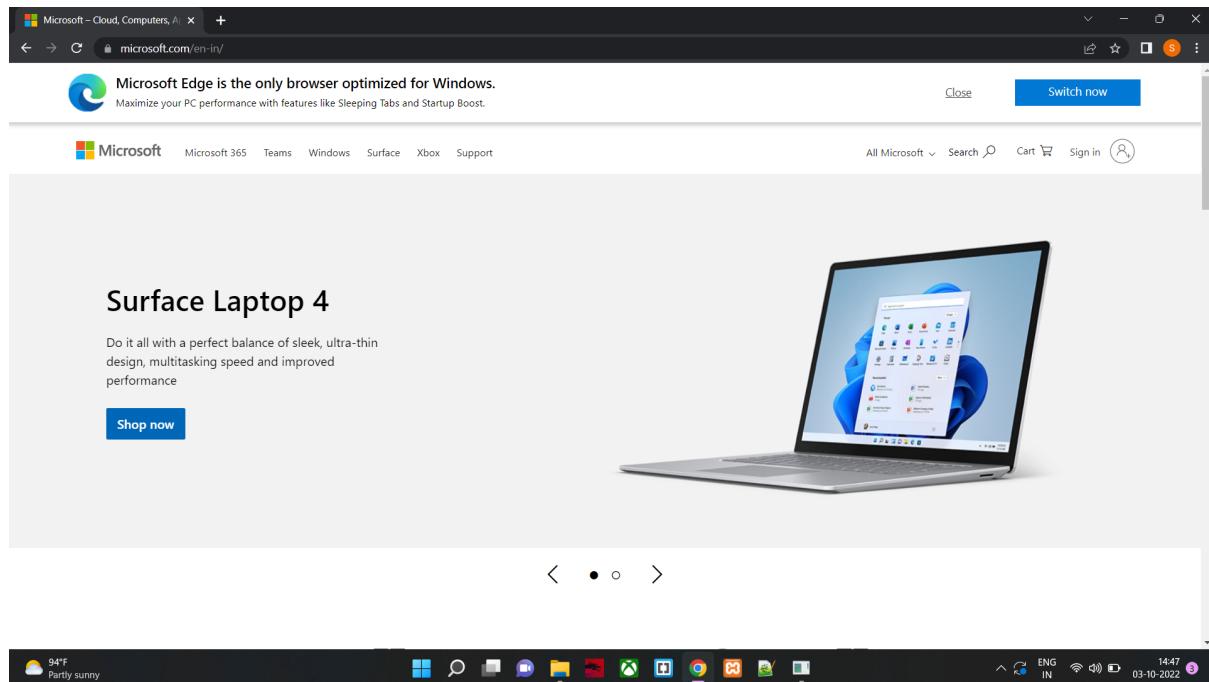
4. Write a servlet that returns a page to Internet Explorer users saying they will be sent to <http://www.microsoft.com> after 10 seconds. Send them there after that timeout. Send Firefox users to <http://www.mozilla.org> after the same delay.

Java code :-

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.util.*;

public class week8_4 extends HttpServlet
{
    public void doGet(HttpServletRequest request,HttpServletResponse response)
    throws ServletException,IOException
    {
        PrintWriter out=response.getWriter();
        response.setContentType("text/html");
        String ua=request.getHeader("User-Agent");
        if(ua.equals("Chrome"))
        {
            response.setIntHeader("Refresh",10);
            response.sendRedirect("http://www.microsoft.com");
        }
        else
        {
            response.setIntHeader("Refresh",10);
            response.sendRedirect("http://www.mozilla.org ");
        }
    }
}
```

Output :-



Week 9

1. Develop a servlet application that checks whether the user is new or not. If he is a new user than he must show first an instruction page and a link through which he can go to the login page otherwise a direct login page should be displayed to the user. That login page asks the user to enter his name & password and the name of the file whose content he wants to see. If the file name that user enter exist then its data should be displayed in the word file or simply on the page.(Make use of Cookies and cookies should be valid upto 1 day only)

Java Code :-

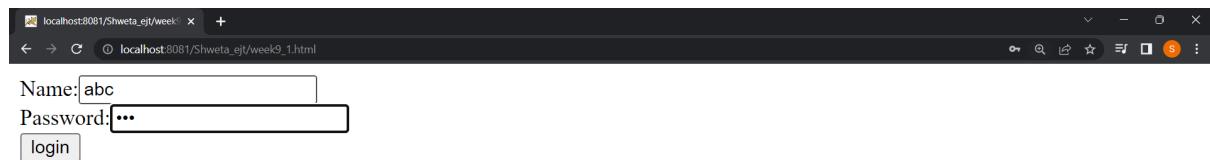
```
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

public class week9_1 extends HttpServlet
{
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException
    {
        response.setContentType("text/html");
        PrintWriter out=response.getWriter();
        String name = request.getParameter("name");
        String password = request.getParameter("password");
        if(name.equals("abc") && password.equals("abc"))
        {
            out.print("You are successfully logged in!");
            out.print("<br>");
            out.print("<br>Welcome, "+name);
            Cookie ck=new Cookie("name",name);
            response.addCookie(ck);
        }
        else
        {
            out.print("sorry, username or password error!");
            request.getRequestDispatcher("week9_1.html").include(request,
            response);
        }
    }
}
```

Html Code :-

```
<html>
    <form action="week9_1" method="post">
        Name:<input type="text" name="name"><br>
        Password:<input type="password" name="password"><br>
        <input type="submit" value="login">
    </form>
</html>
```

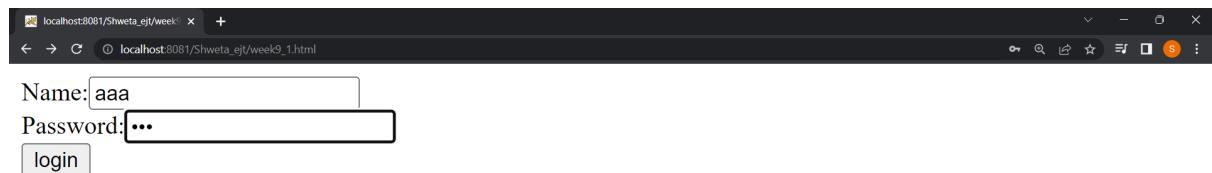
Output :-



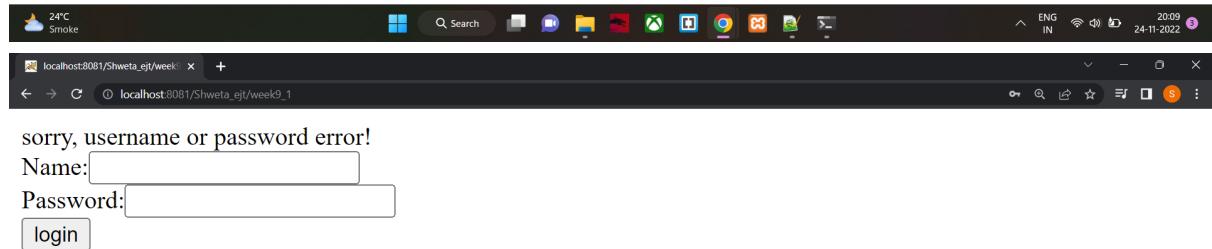
You are successfully logged in!

Welcome, abc





A screenshot of a web browser window titled "localhost:8081/Shweta_ejt/week9_1.html". The page contains a login form with three fields: "Name:" followed by an input field containing "aaa", "Password:" followed by an input field containing "....", and a "login" button.



A screenshot of a web browser window titled "localhost:8081/Shweta_ejt/week9_1". The page displays the message "sorry, username or password error!" above the login form. The form fields are identical to the first screenshot: "Name:" with "aaa" and "Password:" with "....".



2. Develop a Servlet application which sets 3 Cookies.1 Session & remaining Persistent. Test for the same accordingly.

Java Code :-

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.util.*;

public class week9_2 extends HttpServlet
{
    public void doGet(HttpServletRequest request , HttpServletResponse response)
    throws ServletException,IOException
    {
        PrintWriter out=response.getWriter();
        response.setContentType("text/html");

        Cookie c1 = new Cookie("c1","Shweta");
        c1.setMaxAge(60*60*24);
        response.addCookie(c1);

        Cookie c2= new Cookie("c2","Chodvadiya");
        response.addCookie(c2);

        Cookie c3 = new Cookie("c3","B");
        c3.setMaxAge(60*60*24*30);
        response.addCookie(c3);

        Cookie[] cnt = request.getCookies();
        if(cnt!=null)
        {
            for(int i=0;i<cnt.length;i++)
            {
                Cookie c=cnt[i];
                if(c.getName().equals("c1"))
                {
                    out.println(c.getValue());
                }
                if(c.getName().equals("c2"))
                {
                    out.println(c.getValue());
                }
                if(c.getName().equals("c3"))
                {
                    out.println(c.getValue());
                }
            }
        }
        else
    }
}
```

```
{  
    out.println("Welcom User!.....");  
}  
}  
}
```

Output :-



Welcom User!.....



Shweta Chodvadiya B



3. Develop a servlet application that counts the no of times user has visited the page.

Java Code :-

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.util.*;

public class week9_3 extends HttpServlet
{
    public void doGet(HttpServletRequest request,HttpServletResponse response)
    throws ServletException,IOException
    {
        PrintWriter out=response.getWriter();
        response.setContentType("text/html");

        HttpSession session = request.getSession();
        String heading ;

        Integer cnt=(Integer)session.getAttribute("accessCount");

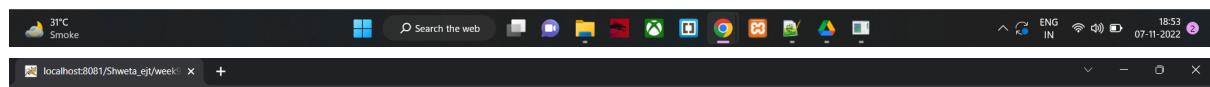
        if(cnt==null)
        {
            cnt = new Integer(0);
            heading ="Welcome New User...!";
        }
        else
        {
            heading = "Welcome back....!";
            cnt = new Integer(cnt.intValue()+1);
        }
        session.setAttribute("accessCount",cnt);
        out.println("<html><h1>" +heading + "<br><br>" + "No.of time visited website:" +cnt+ "</h1><html>");
    }
}
```

Output :-



Welcome New User...!

No.of time visited website:0



Welcome back....!

No.of time visited website:4



Week 10

1. Create a JSP page which will take itemid, no. of items and discount code from user and will show the total price accordingly. Create an instance of a class which is having properties: itemID (a String), a numItems (an int), a discountCode (a double), and two read-only properties, itemCost and totalCost.

Html Code :-

```
<html>
    <head>
        <title>Week10_1</title>
    </head>
    <body bgcolor="lightgreen" >
        <br><center>
            <FONT color="red" size="7">WELCOME TO JSP</font>
            <br><br><br> <br>
        <form action="week10_1.jsp">
            PRODUCT NAME: <input type="text" name="t1" size="20"/><br>
            NUMBER OF QUANTITY :<input type="text" name="t2" size="20"/>
            >
            <br> PRICE<input type = "text" name="t3" size="20"/>
            <br> <input type="submit" value="SUBMIT"/>
            <input type="Reset" value="Reset"/>
        </form>
    </body>
</html>
```

JSP Code:-

```
<html>
    <head>
        <title>Week10_1</title>
    </head>
    <body bgcolor="lightgreen" >
        <br>
        <center>
            <FONT color="red" size="7"> WELCOME TO BIG BAZAR BILL PAGE
            <br><br><br>
            YOUR BILL IS,
            <%
                String pn=request.getParameter("t1");
                String qnty=request.getParameter("t2");
                String pr=request.getParameter("t3");
                int q=Integer.parseInt(qnty);
                int price=Integer.parseInt(pr);
                int bill=price*q;
                if (bill>1000)
                {
                    %>
```

```
<jsp:forward page="week10_1_2.jsp">
    <jsp:param name="bill" value="<%="bill%"%>" />
</jsp:forward>
<%
}
else
{
    out.println(bill);
}
%
</body>
</html>
```

Discount page

```
<%@ page import="java.io.* ,java.util.* ,javax.servlet.* ,java.util.Random" %>
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<html>
    <head>
        <title>week10_1</title>
    </head>
    <body bgcolor="lightgreen" >
        <br>
        <center>
            <FONT color="red" size="7">WELCOME TO BIG BAZAR DISCOUNT
            PAGE
            <br><br><br>
            YOUR TOTAL BILL IS : <%=request.getParameter("bill") %>
            <br>
            <br>
            <p>YOUR DISCOUNT BILL IS</p>
            <%
                int bill=Integer.parseInt(request.getParameter("bill"));
                int disc =((bill*30)/100);
                out.println(disc);
                int pay=bill-disc;
            %
            <br><br> AFTER DISCOUNT 30 % BILL IS <%=pay %>
            </br>
        </body>
    </html>
```

Output :-

The image contains two screenshots of a Windows desktop environment, likely a VM or a physical machine, displaying a Java Server Page (JSP) application.

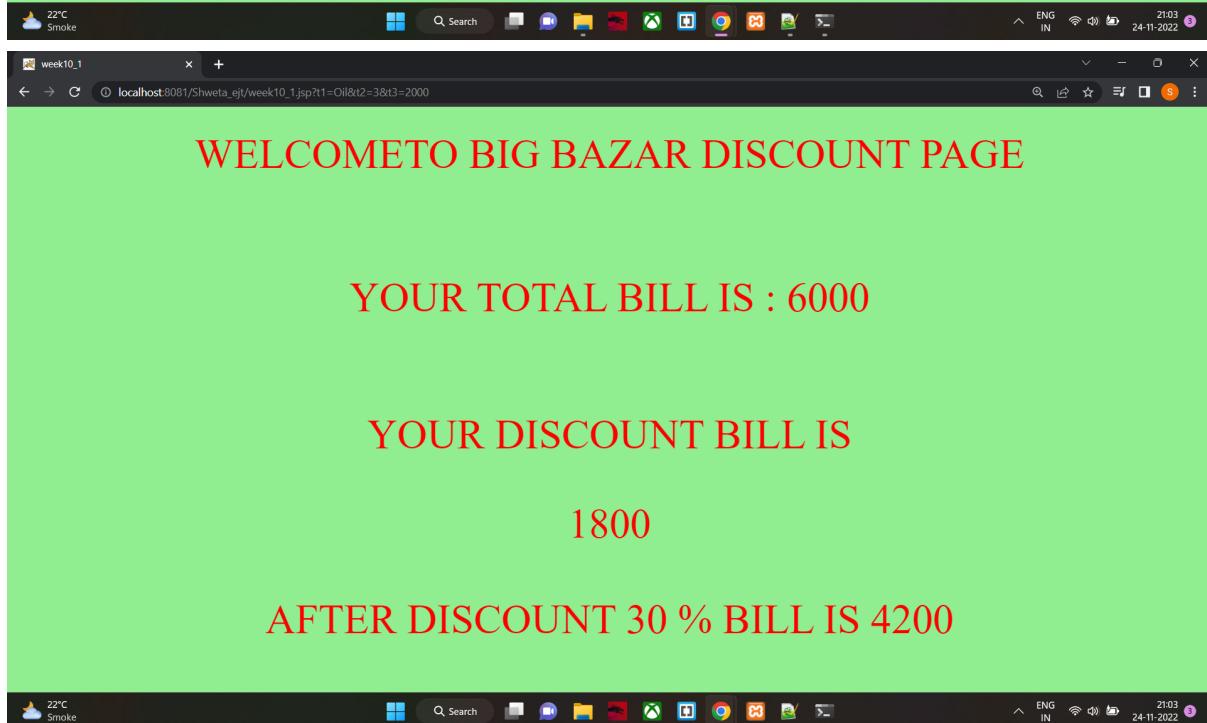
Screenshot 1: A browser window titled "Week10_1" shows a form with the following fields:
- PRODUCT NAME:
- NUMBER OF QUANTITY :
- PRICE
Below the form are two buttons: **SUBMIT** and **Reset**. The browser address bar shows `localhost:8081/Shweta_ejt/week10_1.html`.

Screenshot 2: A browser window titled "Week10_1" shows the results of the form submission:
- WELCOME TO JSP
- YOUR BILL IS, 400
The browser address bar shows `localhost:8081/Shweta_ejt/week10_1.jsp?t1=shampoo&t2=2&t3=200`. The desktop taskbar at the bottom shows various icons and system status.

A screenshot of a web browser window titled "Week10_1". The address bar shows "localhost:8081/Shweta_ejt/week10_1.html". The page content is a form with three text input fields and two buttons:

PRODUCT NAME:	Oil
NUMBER OF QUANTITY:	3
PRICE:	2000

Buttons: SUBMIT, Reset.



Week 13

1. Create an application which shows the detail of all the students.

Java Code :-

```
import my.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;

public class week13_1_2 extends HttpServlet
{
    public void doGet(HttpServletRequest request,HttpServletResponse response)
    throws ServletException,IOException
    {
        PrintWriter out= response.getWriter();

        String name=request.getParameter("name");
        String pwd=request.getParameter("pwd");

        int age=Integer.parseInt(request.getParameter("age"));

        studentBean s=new studentBean();

        s.setname(name);
        s.setpwd(pwd);
        s.setage(age);

        request.getSession().setAttribute("studentBean",s);
        response.sendRedirect("week13_1_1.jsp");
    }
}

package my;
public class week13_1_3 implements java.io.Serializable
{
    private String name;
    private String pwd;
    private int age;

    public studentBean(){}
    public void setname(String name)
    {
        this.name=name;
    }
    public String getname()
    {
        return name;
    }
}
```

```
public void setpwd(String pwd)
{
    this.pwd=pwd;
}
public String getpwd()
{
    return pwd;
}
public void setage(int age)
{
    this.age=age;
}
public int getage()
{
    return age;
}
```

JSP Code :-

```
<html>
    <head>
        <title>week13_1</title>
    </head>
    <body>
        <form action="week13_1_2" method="get">
            Enter The Name:-<input type="text" name="name"/><br>
            Enter The Password:-<input type="text" name="pwd"/><br>
            Enter The Age:-<input type="text" name="age"/><br>
            <input type="submit" value="Submit"/>
        </form>
    </body>
</html>

<html>
    <head>
        <title>week13_1</title>
    </head>
    <body>
        <jsp:useBean id="studentBean" class="my.studentBean" scope="session">
        </jsp:useBean>
        <h3>Student Name: <jsp:getProperty name="studentBean" property="name"/></h3>
        <h3>Student Password: <jsp:getProperty name="studentBean" property="pwd"/></h3>
        <h3>Student Age: <jsp:getProperty name="studentBean" property="age"/>
    </h3>
    </body>
</html>
```

Output :-

Enter The Name:-

Enter The Password:-

Enter The Age:-

