**Adv. Java Lab Assignment**

**JSP 20 Programs**

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**1.Program of Getting Current Date and Time In JSP.**

**Solution:-**

**Index.jsp:-**

<html>

<head><title>JSPApp</title></head>

<body>

<form>

<fieldset style="width:20%; background-color: #ccffeb;">

<legend><b><i>JSP Application<i><b></legend>

<h3>Current Date and Time is :</h3>

<% java.util.Date d = new java.util.Date();

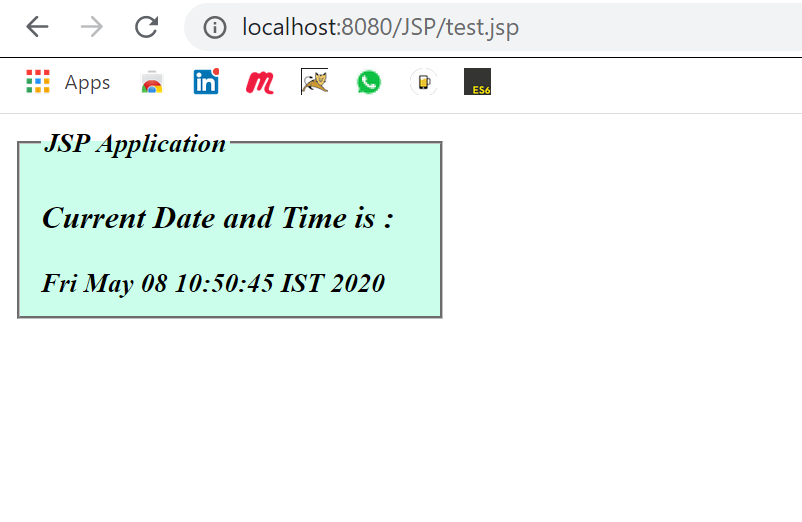
out.println(d.toString()); %>

</fieldset></form>

</body>

</html>

**Output 1:-**

****

**2.Program of file Uploading in JSP.**

**Solution:-**

**Index.html:-**

<html>

<head>

<title>File Uploading Form</title>

</head>

<body>

<form action="upload.jsp" method="post" enctype="multipart/form-data">

<fieldset style="width:20%; background-color: #e6ff99">

<h2>File Upload Example</h2>

<hr>

Select a file to upload: <br /><br />

<input type="file" name="file" size="50" />

<br /><br />

<input type="submit" value="Upload File" />

</fieldset>

</form>

</body>

</html>

**Upload.jsp:-**

<%@ page import="java.io.\*,java.util.\*, javax.servlet.\*" %>

<%@ page import="javax.servlet.http.\*" %>

<%@ page import="org.apache.commons.fileupload.\*" %>

<%@ page import="org.apache.commons.fileupload.disk.\*" %>

<%@ page import="org.apache.commons.fileupload.servlet.\*" %>

<%@ page import="org.apache.commons.io.output.\*" %>

<%File file ;

int maxFileSize = 5000 \* 1024;

int maxMemSize = 5000 \* 1024;

ServletContext context = pageContext.getServletContext();

String filePath = context.getInitParameter("file-upload");

String contentType = request.getContentType();

if ((contentType.indexOf("multipart/form-data") >= 0))

{

DiskFileItemFactory factory = new DiskFileItemFactory();

factory.setSizeThreshold(maxMemSize);

factory.setRepository(new File("D:\\temp"));

ServletFileUpload upload = new ServletFileUpload(factory);

upload.setSizeMax( maxFileSize );

try

{

List fileItems = upload.parseRequest(request);

Iterator i = fileItems.iterator();

out.println("<html>");

out.println("<head>");

out.println("<title>JSP File upload</title>");

out.println("</head>");

out.println("<body>");

while ( i.hasNext () )

{

FileItem fi = (FileItem)i.next();

if ( !fi.isFormField () )

{

String fieldName = fi.getFieldName();

String fileName = fi.getName();

boolean isInMemory = fi.isInMemory();

long sizeInBytes = fi.getSize();

if( fileName.lastIndexOf("\\") >= 0 )

{

file = new File( filePath +

fileName.substring( fileName.lastIndexOf("\\"))) ;

}

else

{

file = new File( filePath +

fileName.substring(fileName.lastIndexOf("\\")+1)) ;

}

fi.write( file ) ;

out.println("Uploaded Filename: " + filePath +

fileName + "<br>");

}

}

out.println("</body>");

out.println("</html>");

}

catch(Exception ex)

{

System.out.println(ex);

}

}

else

{

out.println("<html>");

out.println("<head>");

out.println("<title>Servlet upload</title>");

out.println("</head>");

out.println("<body>");

out.println("<p>No file uploaded</p>");

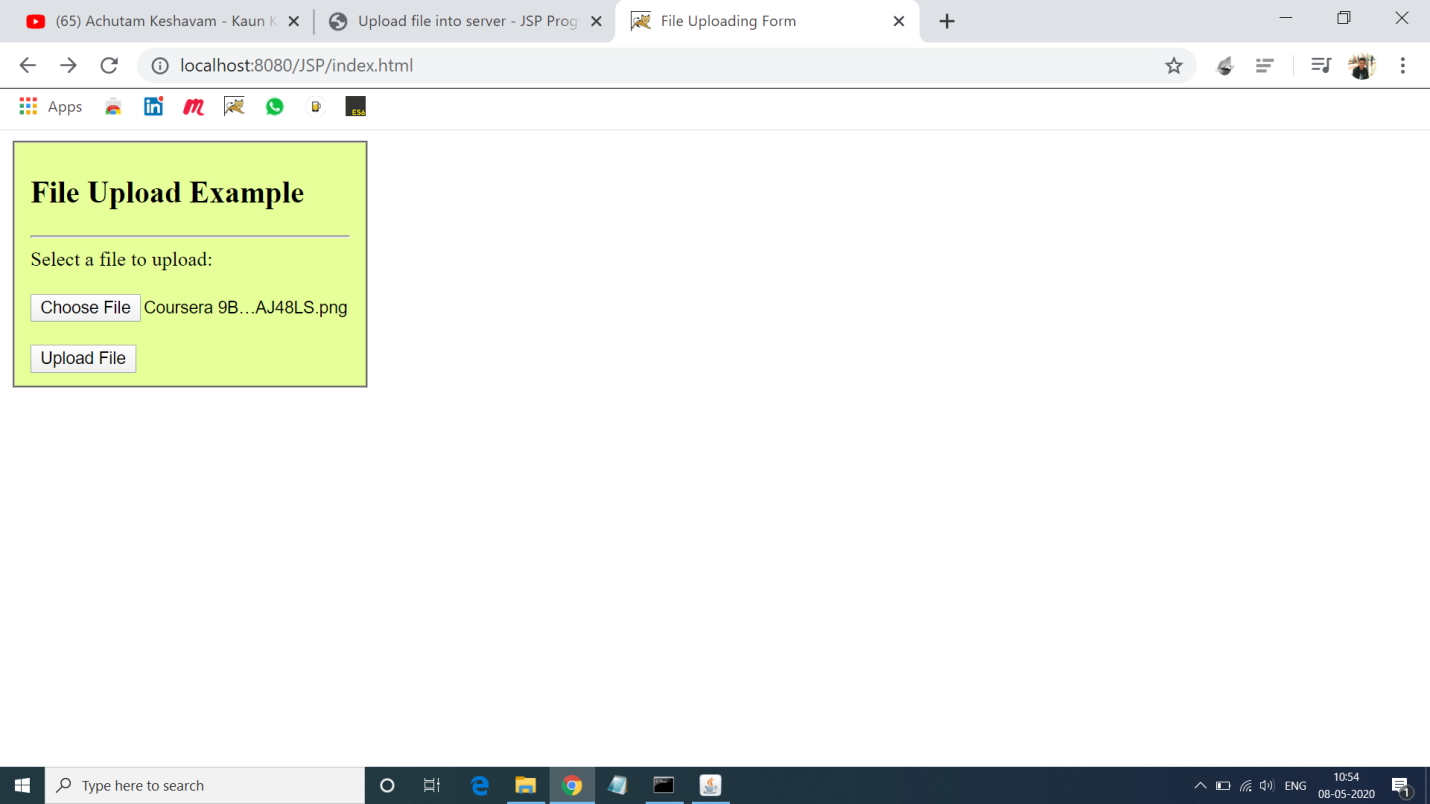
out.println("</body>");

out.println("</html>");

}

%>

**Output 2:-**

****

**3.Program of Auto Refreshing Page in JSP.**

**Solution:-**

**Autorefesh.jsp:-**

<%@ page import="java.io.\*,java.util.\*" %>

<html>

<head>

<title>Auto Refresh</title>

</head>

<body>

<center>

<form>

<fieldset style="width:20%; background-color:#e6ffe6;">

<legend>Auto refresh</legend>

<h2>Auto Refresh Example</h2>

<%

response.setIntHeader("Refresh", 1);

Calendar calendar = new GregorianCalendar();

String am\_pm;

int hour = calendar.get(Calendar.HOUR);

int minute = calendar.get(Calendar.MINUTE);

int second = calendar.get(Calendar.SECOND);

if(calendar.get(Calendar.AM\_PM) == 0)

am\_pm = "AM";

else

am\_pm = "PM";

String CT = hour+":"+ minute +":"+ second +" "+ am\_pm;

out.println("Crrent Time: " + CT + "\n");

%>

</fieldset>

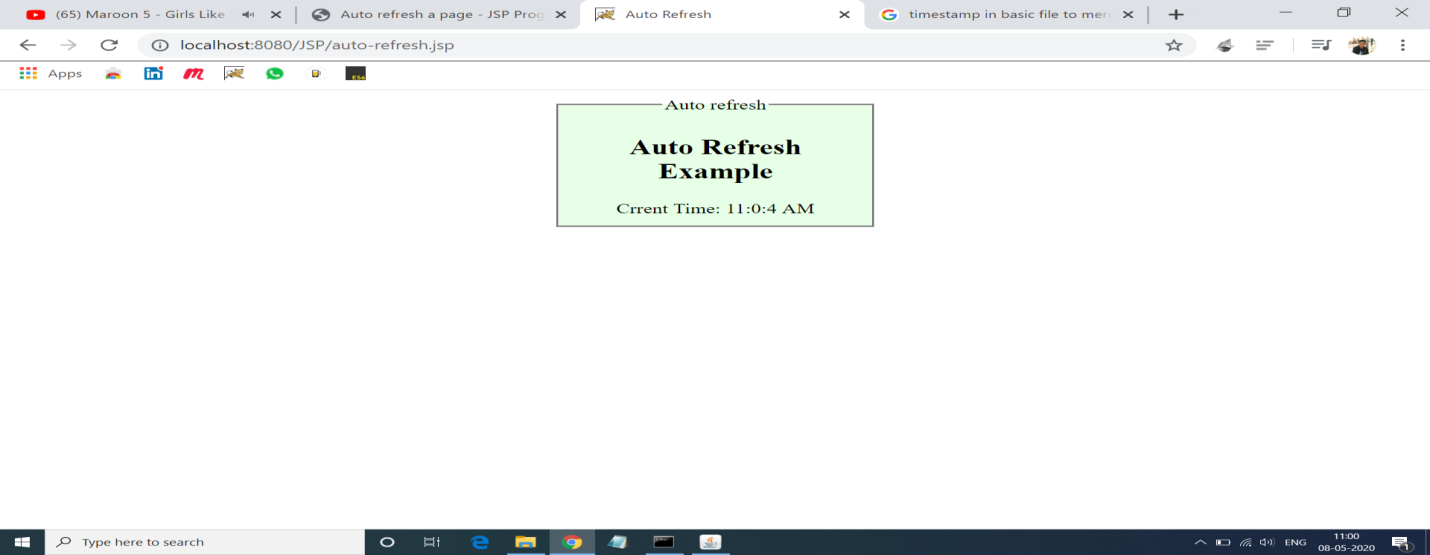
</form>

</center>

</body>

</html>

**Output 3:-**

****

**4.Program to Count no. of visitor in website.**

**Solution:-**

**Count.jsp:-**

<%@ page import="java.io.\*,java.util.\*" %>

<html>

<head>

<title>Count visitor</title>

</head>

<body>

<form>

<fieldset style="width:20%; background-color:#e6ffe6;">

<legend>Count visitor</legend>

<%

Integer hitsCount =

(Integer)application.getAttribute("hitCounter");

if( hitsCount ==null || hitsCount == 0 )

{

out.println("Welcome to my website!!");

hitsCount = 1;

}

else

{

out.println("Welcome to my website!!");

hitsCount += 1;

}

application.setAttribute("hitCounter", hitsCount);

%>

<p>You are visitor number: <%= hitsCount%></p>

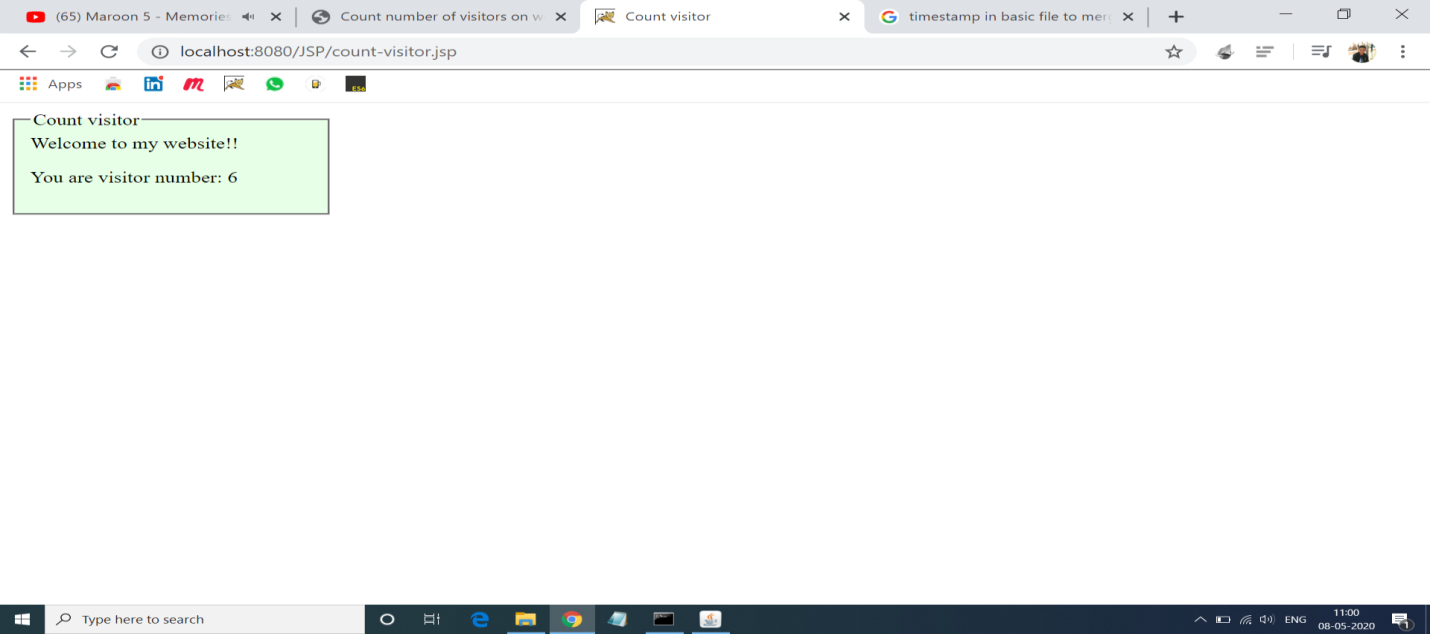
</fieldset>

</form>

</body>

</html>

**Output 4:-**

****

**5.Program of Session Tracking in JSP.**

**Solution:-**

**Session.jsp:-**

<%@ page import="java.io.\*,java.util.\*" %>

<%.

Date createTime = new Date(session.getCreationTime());

Date lastAccessTime = new Date(session.getLastAccessedTime());

String title = "Welcome Back to my website";

Integer visitCount = new Integer(0);

String visitCountKey = new String("visitCount");

String userIDKey = new String("userID");

String userID = new String("Surendra");

if (session.isNew())

{

title = "Welcome to my website";

session.setAttribute(userIDKey, userID);

session.setAttribute(visitCountKey, visitCount);

}

%>

<html>

<head>

<title>Session Tracking</title>

</head>

<body>

<center>

<h1>Session Tracking Example</h1>

</center>

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

<tr bgcolor="#ffcccc">

<th>Session info</th>

<th>Value</th>

</tr>

<tr >

<td>id</td>

<td><% out.print( session.getId()); %></td>

</tr>

<tr>

<td>Creation Time</td>

<td><% out.print(createTime); %></td>

</tr>

<tr>

<td>Time of Last Access</td>

<td><% out.print(lastAccessTime); %></td>

</tr>

<tr>

<td>User ID</td>

<td><% out.print(userID); %></td>

</tr>

<tr>

<td>Number of visits</td>

<td><% out.print(visitCount); %></td>

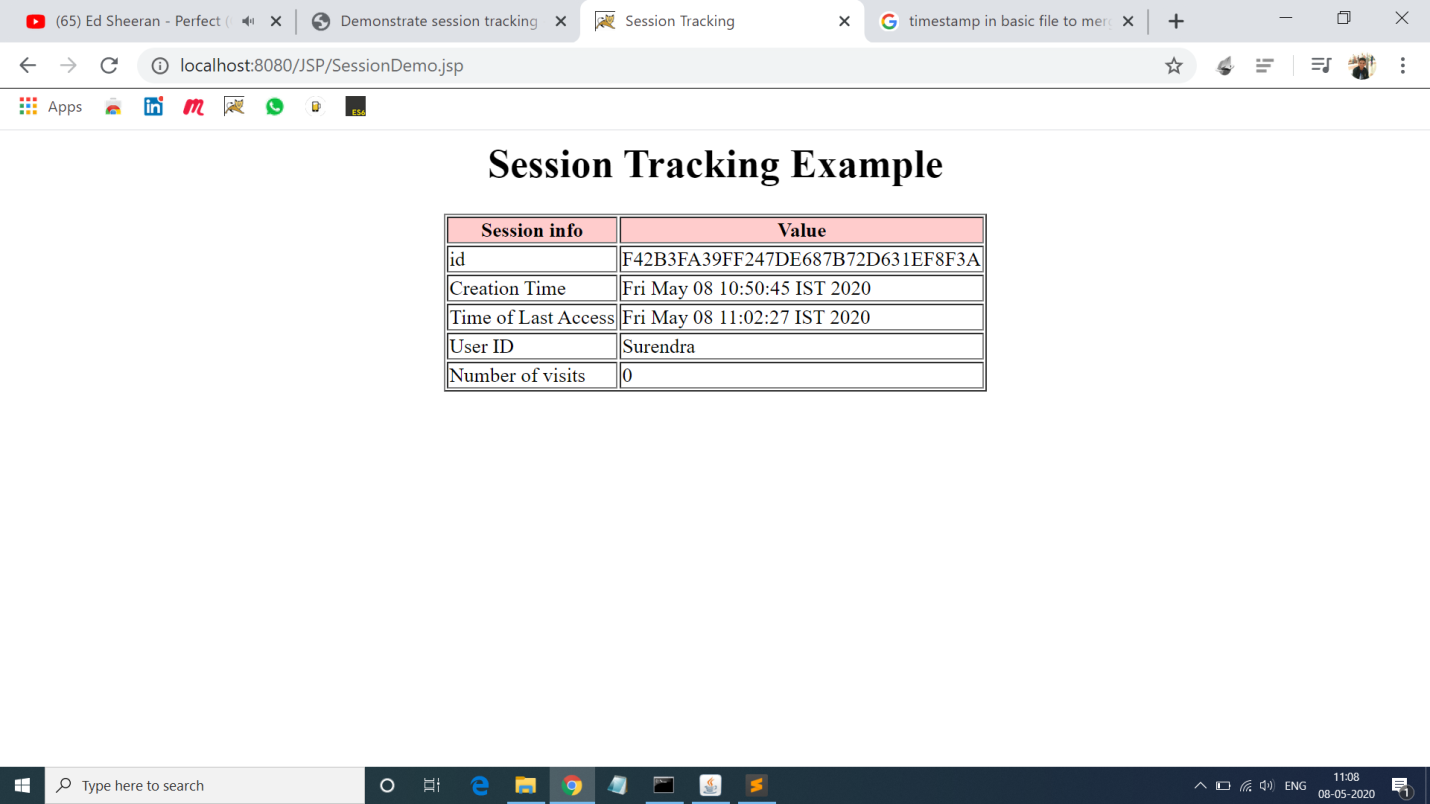
</tr>

</table>

</body>

</html>

**Output 5:-**

****

**6.Program of error Handling in JSP.**

**Solution:-**

**Index.html:-**

<html>

<head>

<title>Exception Example</title>

</head>

<body>

<form action="process.jsp">

<fieldset style="width:20%; background-color:#e6ffe6;">

<center>

<h3>Exception Example</h3>

Enter number: <input type="text" name="n1" /><br/><br/>

Enter number: <input type="text" name="n2" /><br/><br/>

<input type="submit" value="Divide"/>

</center>

</fieldset>

</form>

</body>

</html>

**Process.jsp:-**

<%@ page errorPage="error.jsp" %>

<%

String num1=request.getParameter("n1");

String num2=request.getParameter("n2");

int a=Integer.parseInt(num1);

int b=Integer.parseInt(num2);

int c=a/b;

out.print("Division of numbers is: "+c);

%>

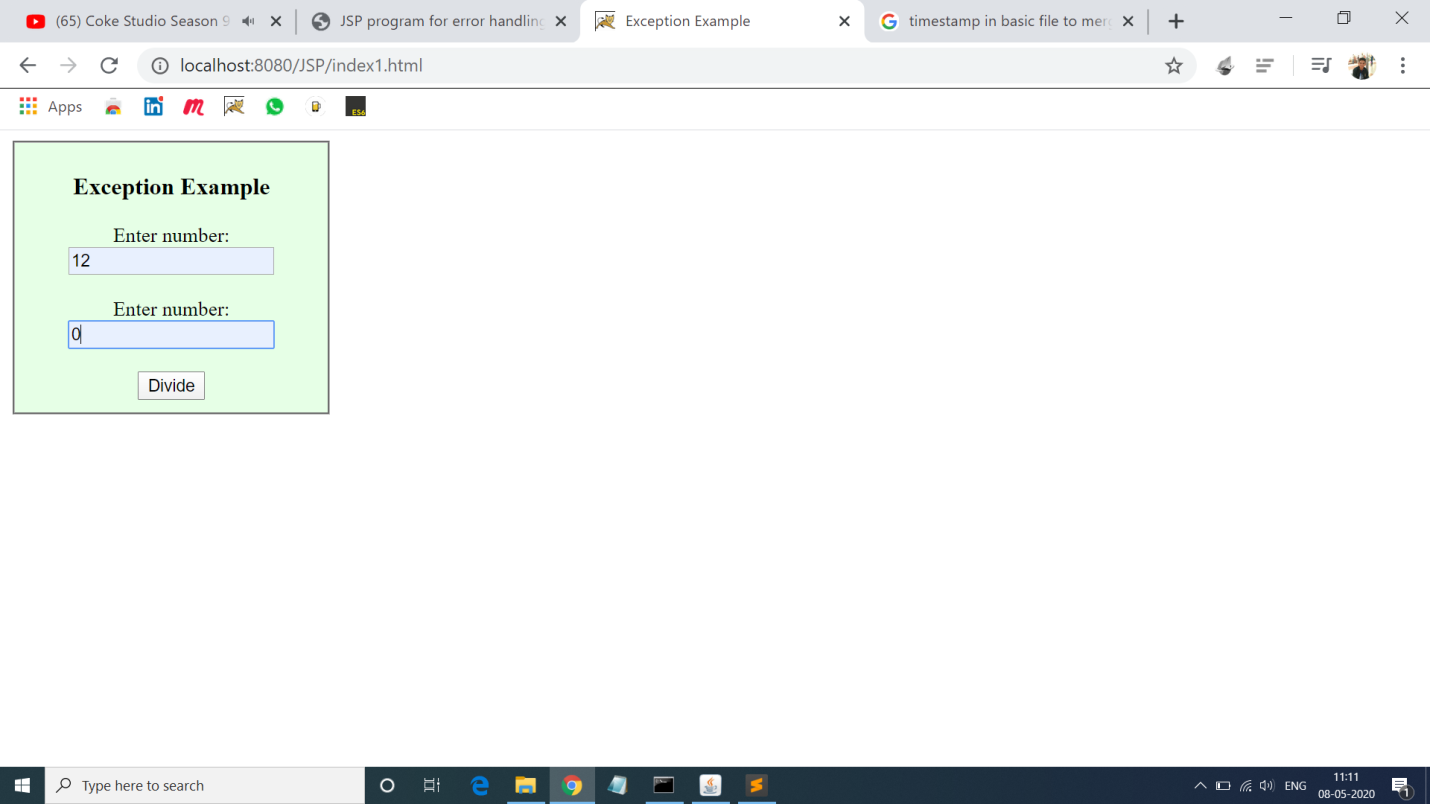
**Error.jsp:-**

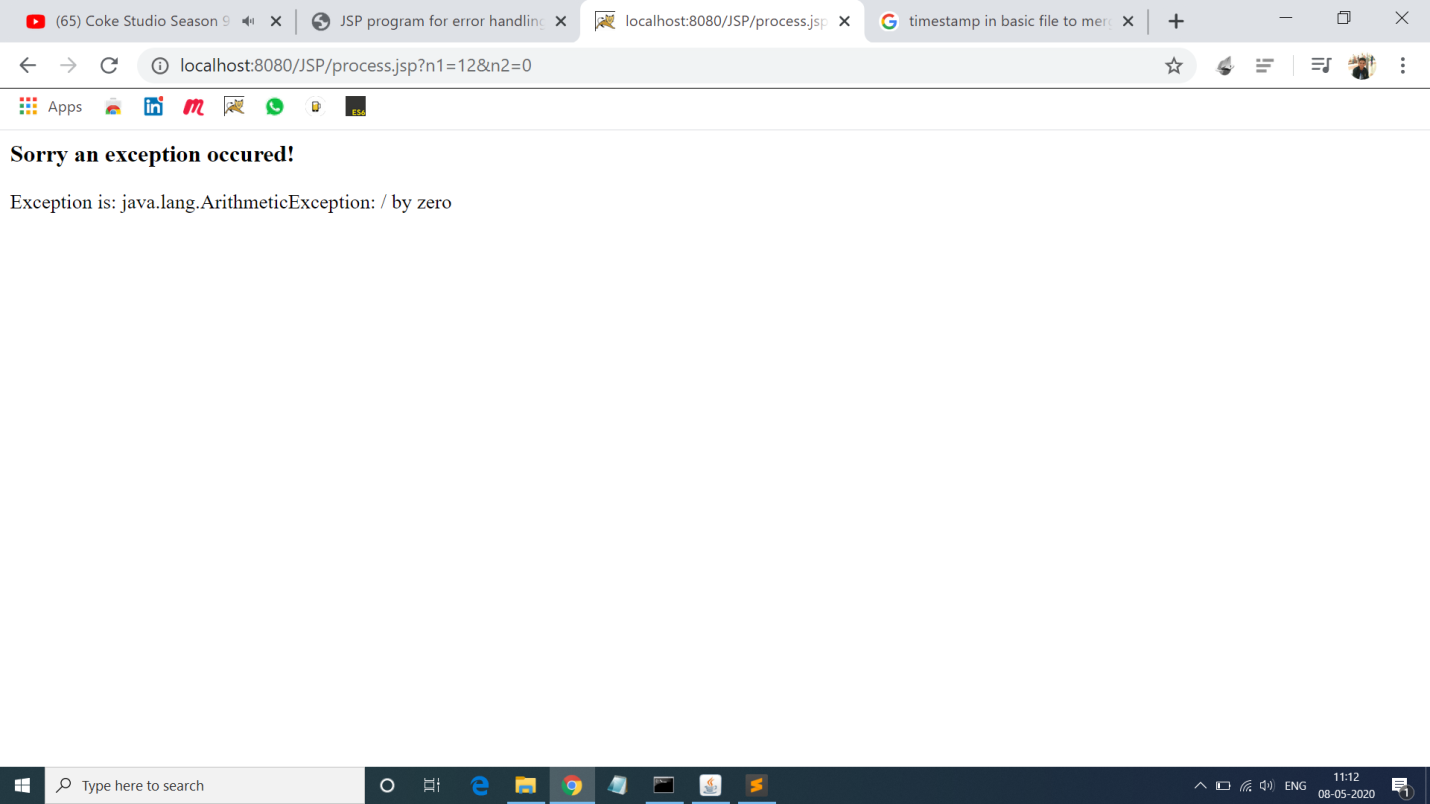
<%@ page isErrorPage="true" %>

<h3>Sorry an exception occured!</h3>

Exception is: <%= exception %>

**Output 6:-**

****

****

**7.Program to Demonstrate expression Tag.**

**Solution:-**

**Index.html:-**

<html>

<title>Sample Example </title>

<body>

<form method="post" action="index.jsp">

<fieldset style="width:30%; background-color:#b3d1ff">

<h2><center> Mathematical Operation</center></h2>

<hr>

<font size=5 face="Times New Roman">

<input type="radio" name="a1" value="add" checked>Addition</input><br>

<input type="radio" name="a1" value="sub">Subtraction</input><br>

<input type="radio" name="a1" value="mul" >Multiplication</input><br>

<input type="radio" name="a1" value="div" >Division</input><br>

</font>

<table>

<tr>

<td>Enter first Value:</td>

<td> <input type="text" name="t1" value=""></td>

</tr>

<tr>

<td>Enter second Value: </td>

<td><input type="text" name="t2" value=""></td>

</tr><br>

<tr>

<td></td>

<td><input type="submit" name="result" value="Check result!"></td>

</tr>

</table>

</fieldset>

</form>

</body>

</html>

**Input.jsp:-**

<%@ page errorPage="error1.jsp" %>

<html>

<body>

<H1><center>Result for <%=request.getParameter("a1")%></center></H1>

<%

String num1=request.getParameter("t1");

String num2=request.getParameter("t2");

int i=Integer.parseInt(num1);

int j=Integer.parseInt(num2);

int k=0;

String str=request.getParameter("a1");

if(str.equals("add"))

k=i+j;

if(str.equals("sub"))

k=i-j;

if(str.equals("mul"))

k=i\*j;

if(str.equals("div"))

k=i/j;

%>

Result is: <%=k%>

</body>

</html>

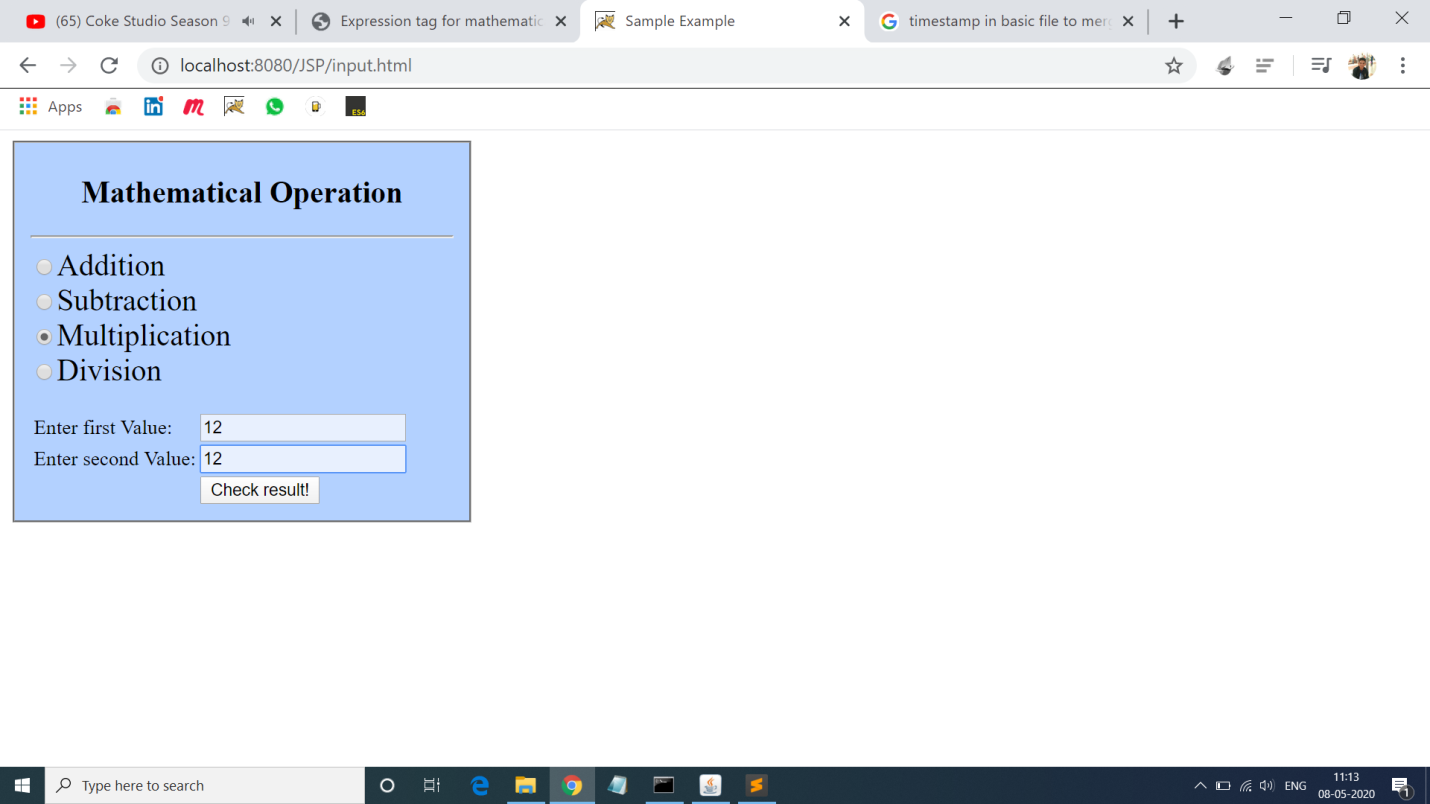
**Error.jsp:-**

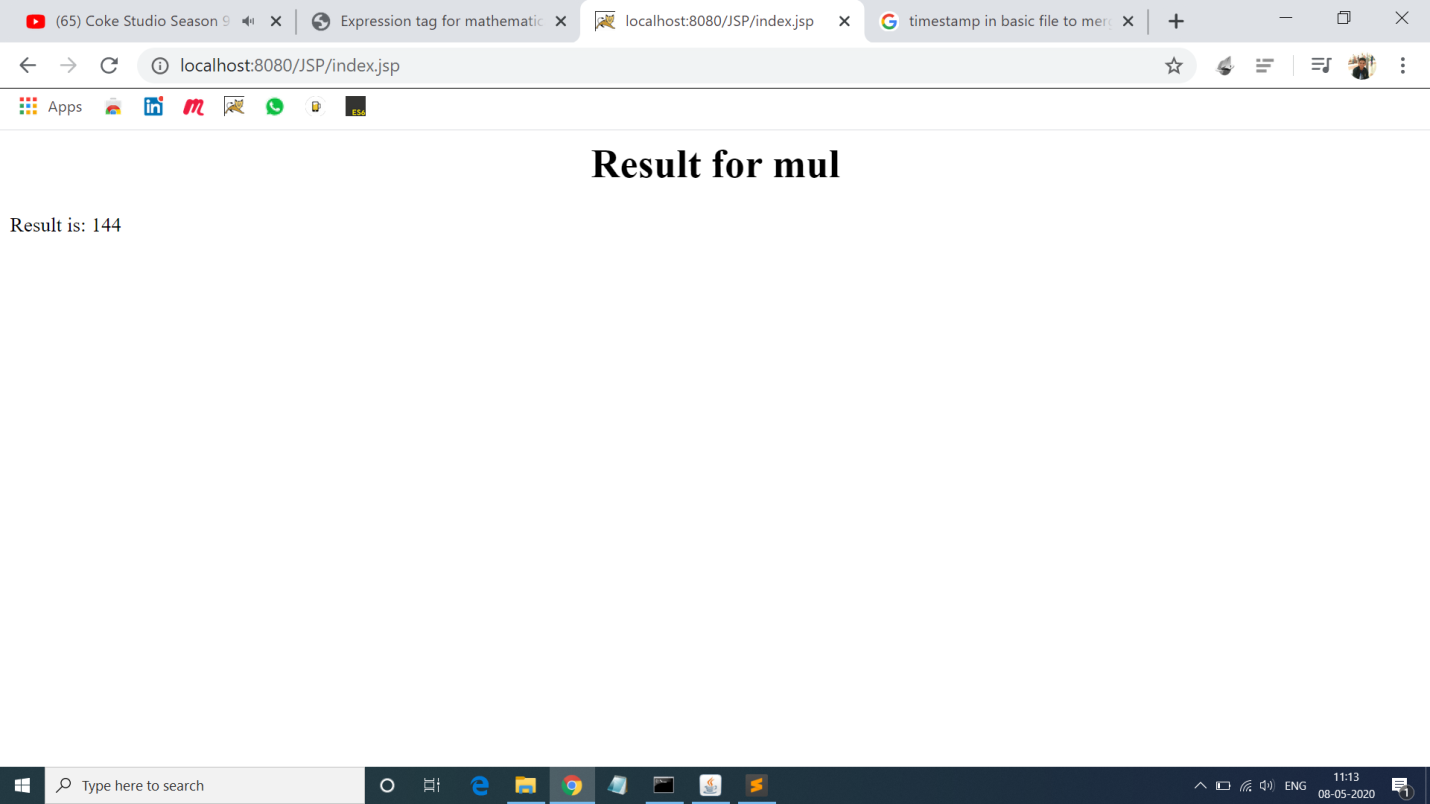
<%@ page isErrorPage="true" %>

<h3>Sorry an exception occured!</h3>

Exception is: <%= exception %>

**Output 7:-**

****

****

# 8.Program for Detect locale, language settings & local specific time.

# Solution:-

# <%@ page import="java.io.\*,java.util.Locale" %>

# <%@ page import="javax.servlet.\*,javax.servlet.http.\* "%>

# <%@ page import="java.text.NumberFormat,java.util.Date" %>

# <%@ page import="java.text.DateFormat,java.util.Date" %>

# <%

# Locale locale = request.getLocale();

# String language = locale.getLanguage();

# String country = locale.getCountry();

# String title = "Locale Specific Dates";

# String date = DateFormat.getDateTimeInstance(DateFormat.FULL, DateFormat.SHORT, locale).format(new Date( ));

# NumberFormat nft = NumberFormat.getCurrencyInstance(locale);

# String formattedCurr = nft.format(500);

# %>

# <html>

# <head>

# <title>Detecting Locale</title>

# </head>

# <body>

# <form>

# <fieldset style="width:20%; background-color:#e6ffe6;">

# <center>

# <h1>Detecting Locale</h1>

# </center>

# <p align="center">

# <%

# out.println("Language : " + language + "<br />");

# out.println("Country : " + country + "<br />");

# %>

# </p>

# <div align="center">

# <h1><% out.print(title); %></h1>

# <p>Local Date: <% out.print(date); %></p>

# <p>Formatted Currency: <% out.print(formattedCurr); %></p>

# </div>

# </fieldset>

# </form>

# </body>

# </html>

# Output 8:-

# demo8.png

# 9.Program for demonstrate JSP implicit Object.

# Solution:-

# Index.jsp:-

# <%@ page language="java"%>

# <%@ page import="java.util.Date" %>

# <!DOCTYPE html>

# <head>

# <title>Index JSP Page</title>

# </head>

# <body>

# <table border="1"; style="background-color:#ffffcc; width:30%" >

# <caption><h3>JSP Implicit object</h3></caption>

# <tr><td><b>Current Time</b></td>

# <td><% out.print(new Date()); %></td></tr>

# <%response.addCookie(new Cookie("Test","Value")); %>

# <tr><td><b>User context param value</b></td>

# <td><%=application.getInitParameter("User") %></td></tr>

# <tr><td><b>User Session ID</b></td>

# <td><%=session.getId() %></td></tr>

# <% pageContext.setAttribute("Test", "Test Value"); %>

# <tr><td><b>PageContext attribute</b></td>

# <td>{Name="Test",Value="<%=pageContext.getAttribute("Test") %>"}</td></tr>

# <tr><td><b>Generated Servlet Name</b>:</td>

# <td><%=page.getClass().getName() %></td></tr>

# 

# <tr><td><b>Request User-Agent</b></td>

# <td> <%=request.getHeader("User-Agent") %></td></tr>

# </table>

# </body>

# </html>

# Output 9:-

# index(1)12.png

# 10.Program for validate username and Password.

# Solution:-

# Login.html:-

# <!doctype html>

# <html lang="en">

# <head>

# <title>Welcome </title>

# </head>

# <body>

# <form method = "post" action = "db1.jsp">

# <fieldset style="width:23%; background-color:#b3d1ff">

# <h3><center> Login Page</center></h3>

# <hr>

# <table>

# <tr>

# <td>Username:</td>

# <td> <input type = "text" name = "uname"></td>

# </tr>

# <tr>

# <td>Password:</td>

# <td><input type = "password" name = "pwd"></td>

# </tr>

# <tr>

# <td></td>

# <td><input type = "submit" value="check detail" name = "s1"></td>

# </tr>

# </table>

# </fieldset>

# </form>

# <a href="db1.jsp? s1=link">Get all user detail</a>

# </body>

# </html>

# Db.jsp:-

# <%@ page import="java.sql.\*"%>

# <%@ page import="java.util.\*"%>

# <%!

# Connection con;

# PreparedStatement ps1, ps2;

# public void jspInit()

# {

# try

# { Class.forName("com.mysql.jdbc.Driver");

# con = DriverManager.getConnection("jdbc:mysql://localhost:3306/firstdb","milind","root");

# ps1 = con.prepareStatement("select count(\*) from userlist where username = ? and password=?");

# ps2 = con.prepareStatement("select \* from userlist");

# }

# catch(Exception ex)

# {

# ex.printStackTrace();

# }

# }

# %>

# <%

# String param = request.getParameter("s1");

# if(param =="link")

# {

# ResultSet rs = ps2.executeQuery();

# out.println("<table>");

# while(rs.next())

# {

# out.println("<tr>");

# out.println("<td>"+rs.getString(1)+"</td>");

# out.println("<td>"+rs.getString(2)+"</td");

# out.println("</tr>");

# }

# out.println("</table>");

# rs.close();

# }

# else

# { String user = request.getParameter("uname");

# String pass = request.getParameter("pwd");

# ps1.setString(1,user);

# ps1.setString(2,pass);

# ResultSet rs = ps1.executeQuery();

# int cnt = 0;

# if (rs.next())

# cnt = rs.getInt(1);

# if(cnt == 0)

# out.println("<b><i><font color=red>Invalid credential</fonr></i></b>");

# else

# {

# out.println("<form><fieldset style= width:25%; >");

# out.println("<b><i><font color=red>valid credential..</fonr></i></b><br>");

# out.println("<b><i><font size=6 color=blue>Welcome to My Page</fonr></i></b>");

# out.println("</fieldset></form>");

# }

# }

# %>

# <%!

# public void jspDestroy()

# {

# try

# {

# ps1.close();

# ps2.close();

# con.close();

# }

# catch(Exception ex)

# {

# ex.printStackTrace();

# }

# }

# %>

# Output 10:-

# login13.png

# login13,1.png

# 11.Program for Select record from database.

# Solution:-

# Index.jsp:-

# <%@ page import="java.sql.\*"%>

# <%@ page import="java.util.\*"%>

# <html>

# <head>

# <title>SELECT Operation</title>

# </head>

# <body>

# <%!

# Connection con;

# PreparedStatement ps;

# public void jspInit()

# {

# try

# {

# Class.forName("com.mysql.jdbc.Driver");

# con = DriverManager.getConnection("jdbc:mysql://localhost/firstdb","milind","root");

# ps = con.prepareStatement("select \* from users");

# }

# catch(Exception ex)

# {

# ex.printStackTrace();

# }

# }

# %>

# <%

# ResultSet rs = ps.executeQuery();

# out.println("<table border=1 >");

# out.println("<tr style='background-color:#ffffb3; color:red'>");

# out.println("<th>Name</th>");

# out.println("<th> Roll no</th>");

# while(rs.next())

# {

# out.println("<tr style='background-color:#b3ffd9;'>");

# out.println("<td>"+rs.getString(1)+"</td>");

# out.println("<td>"+rs.getInt(2)+"</td>");

# out.println("</tr>");

# }

# out.println("</table>");

# rs.close();

# %>

# </body>

# </html>

# Output 11:-

# db11.png

**12.Program for Display the given Number in words.**

**Solution:-**

**Index.html:-**

<!DOCTYPE html>

<html>

<body>

<form method=get action="test1.jsp">

Enter Any Number : <input type=text name=num><br><br>

<input type=submit value="Display">

</form>

</body>

</html>

**Word.jsp:-**

<%@page contentType="text/html" pageEncoding="UTF-8"%>

<!DOCTYPE html>

<html>

<body>

<font color=red>

<%! int i,n;

String s1;

%>

<% s1= request.getParameter("num");

n=s1.length();

i=0;

do

{

char ch=s1.charAt(i);

switch(ch)

{

case '0': out.println("Zero ");

break;

case '1': out.println("One ");

break;

case '2': out.println("Two ");

break;

case '3': out.println("Three ");

break;

case '4': out.println("Four ");

break;

case '5': out.println("Five ");

break;

case '6': out.println("Six ");

break;

case '7': out.println("Seven ");

break;

case '8': out.println("Eight ");

break;

case '9': out.println("Nine ");

break;

}

i++;

}

while(i<n);

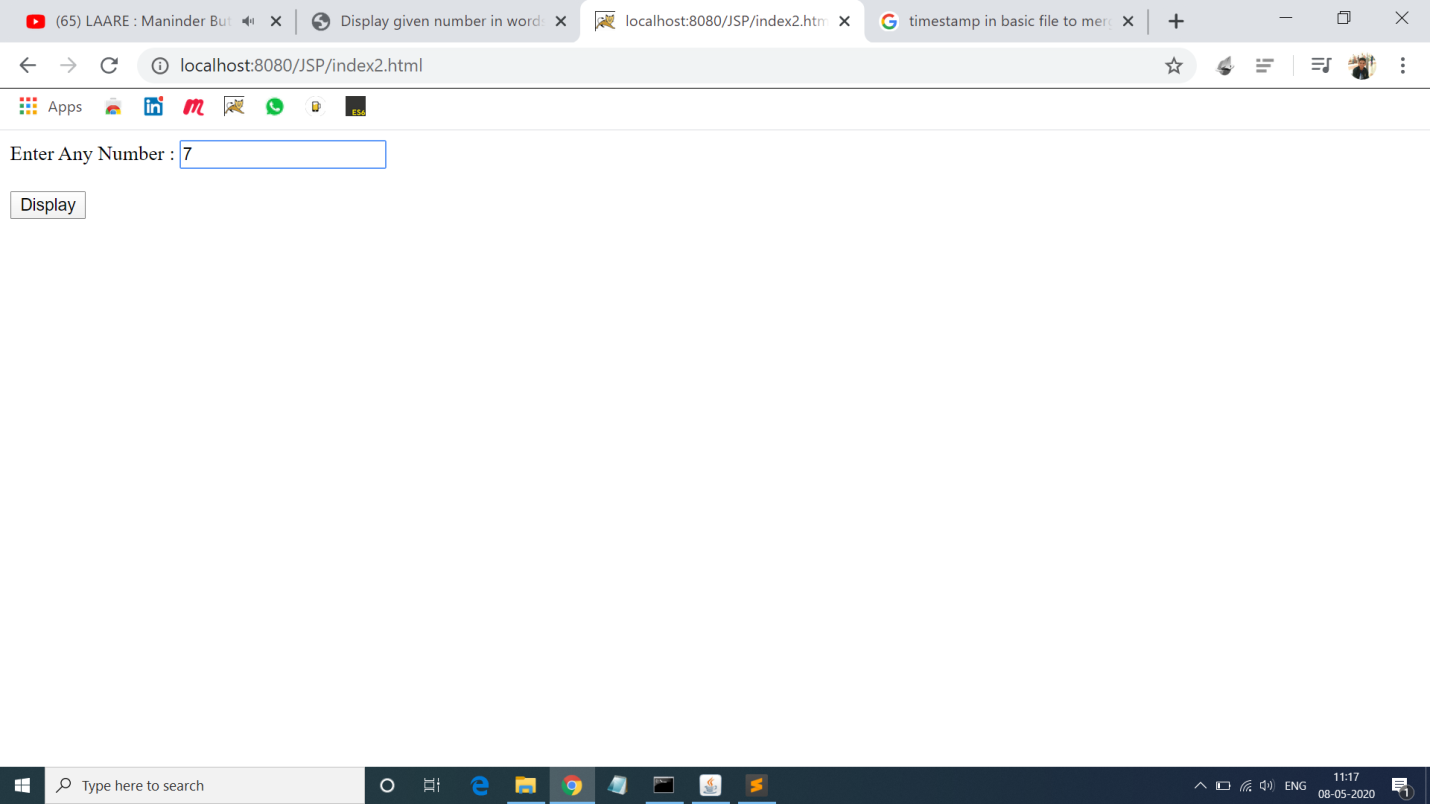
%>

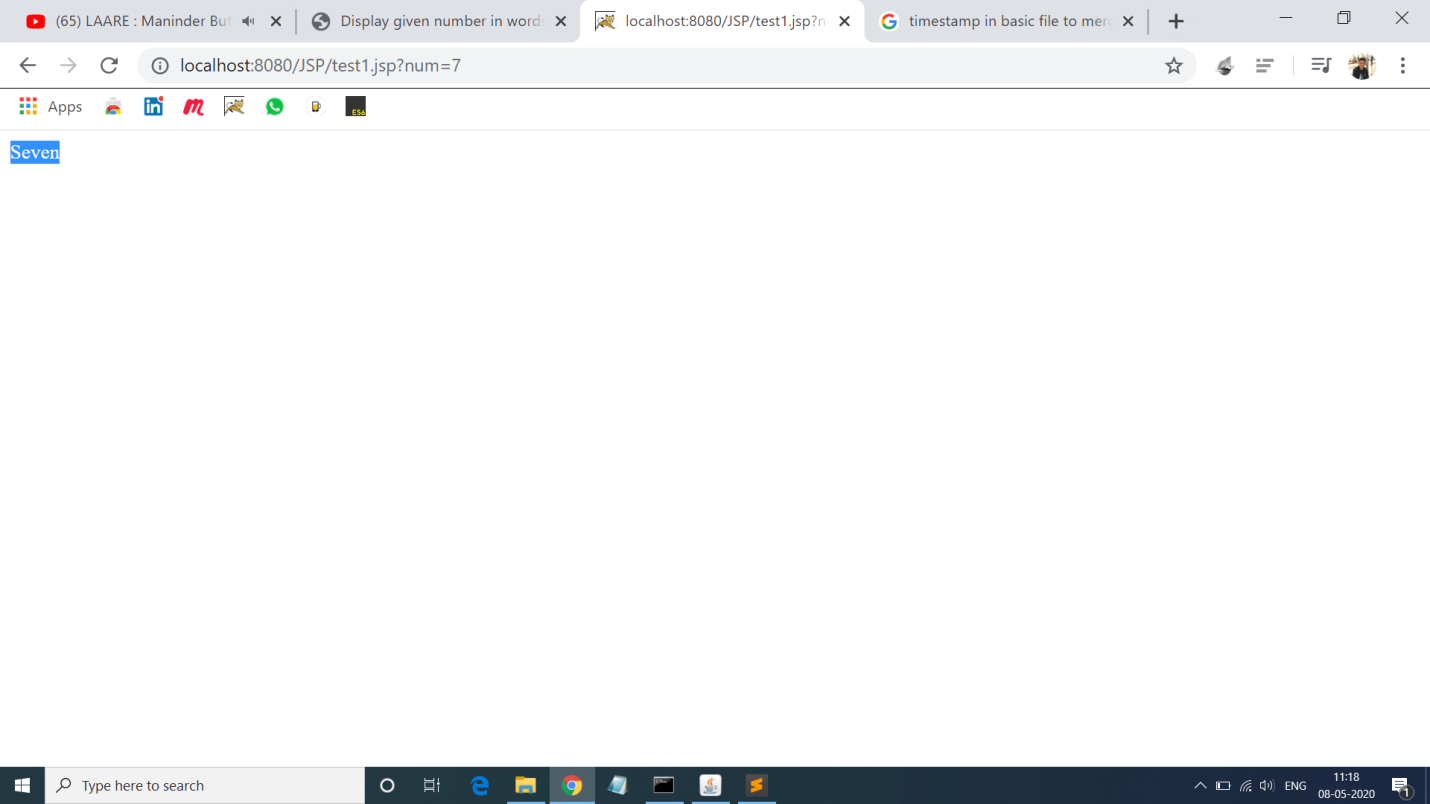
</font>

</body>

</html>

**Output 12:-**

****

****

**13.Program for Generating random number in JSP.**

**Solution:-**

**Random.jsp:-**

<html>

<head><title>First JSP</title></head>

<body>

<%

double num = Math.random();

if (num > 0.95) {

%>

<h2>You'll have a luck day!</h2><p>(<%= num %>)</p>

<%

} else {

%>

<h2>Well, life goes on ... </h2><p>(<%= num %>)</p>

<%

}

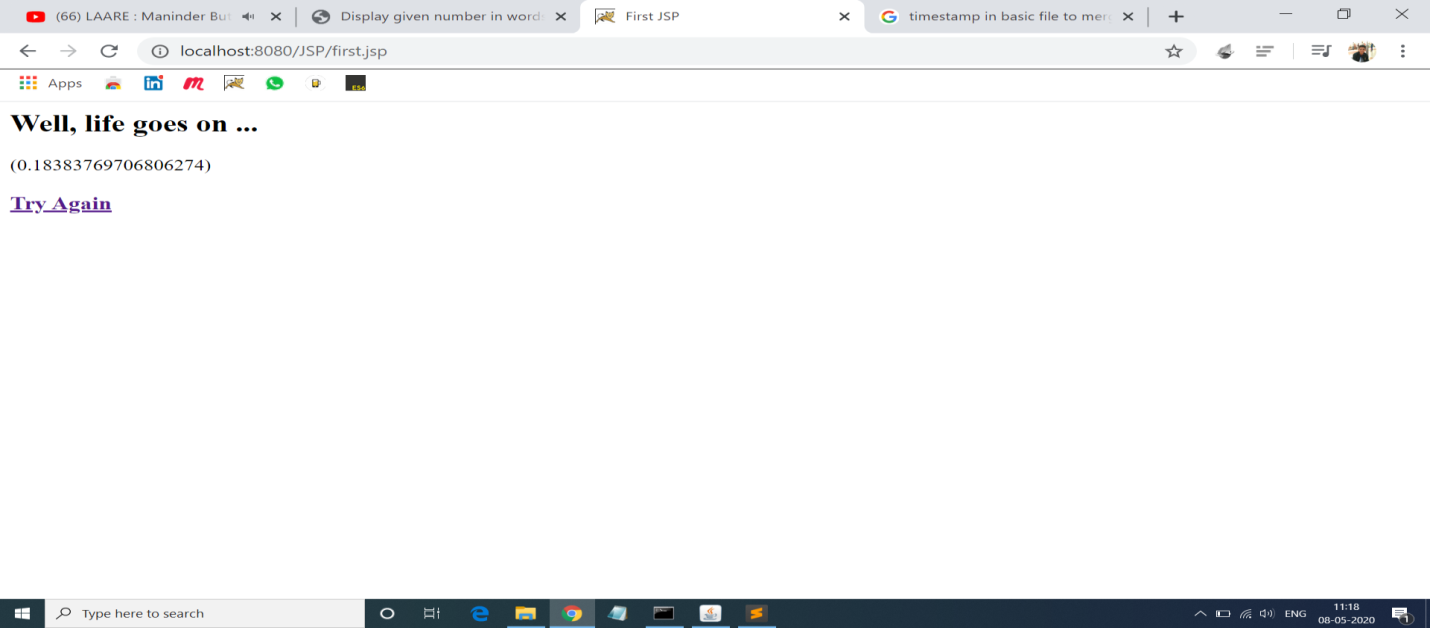
%>

<a href="<%= request.getRequestURI() %>"><h3>Try Again</h3></a>

</body>

</html>

**Output 13:-**

****

14.Program of The <jsp:include> Action.

**Solution:-**

**Date.jsp:-**

<p>Today's date: <%= (new java.util.Date()).toLocaleString()%></p>

**Main.jsp:-**

<html>

<head>

<title>The include Action Example</title>

</head>

<body>

<center>

<h2>The include action Example</h2>

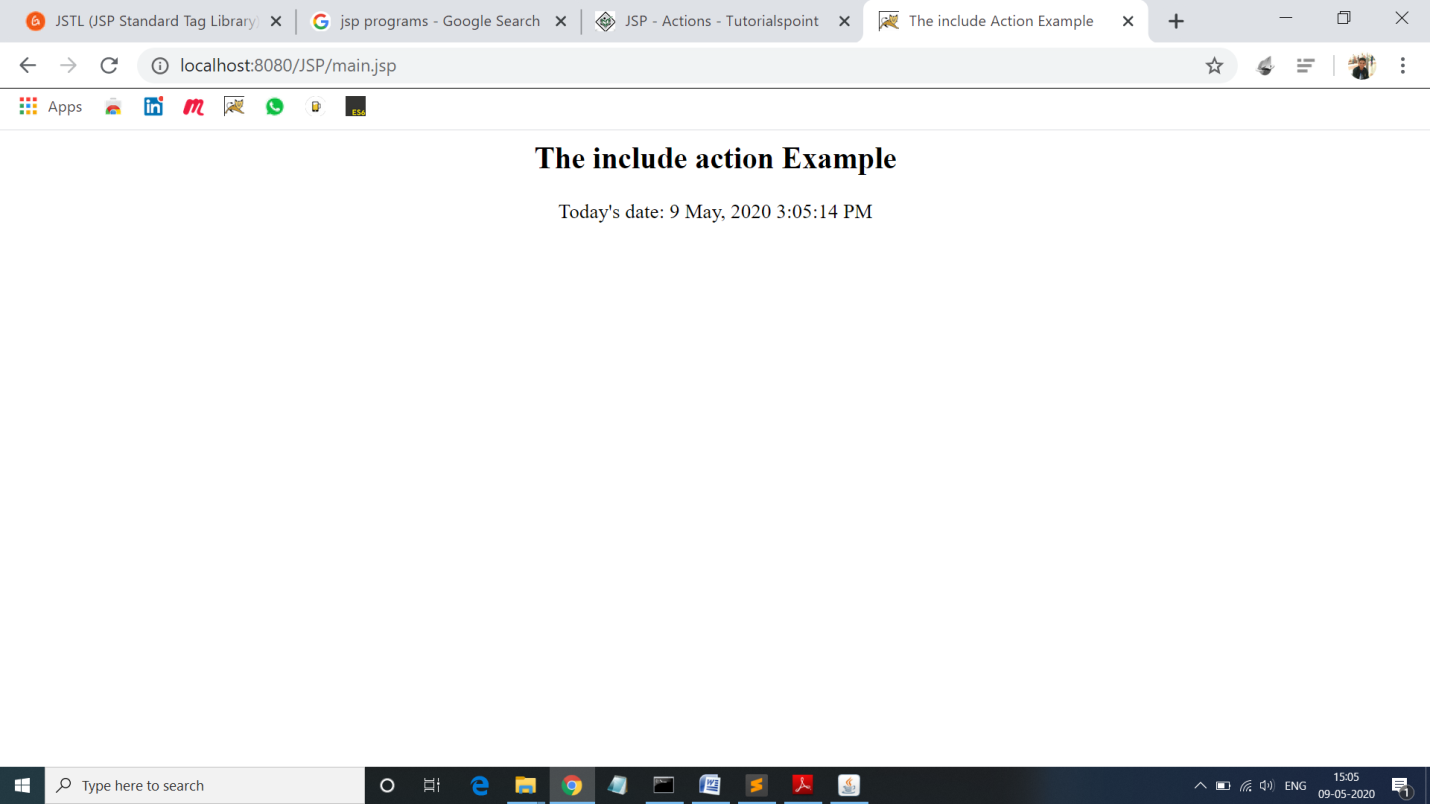
<jsp:include page = "date1.jsp" flush = "true" />

</center>

</body>

</html>

**Output 14:-**

****

**15.Program of <jsp:forward> action.**

**Solution:-**

**Date.jsp:-**

<p>Today's date: <%= (new java.util.Date()).toLocaleString()%></p>

**Main.jsp:-**

<html>

<head>

<title>The include Action Example</title>

</head>

<body>

<center>

<h2>The include action Example</h2>

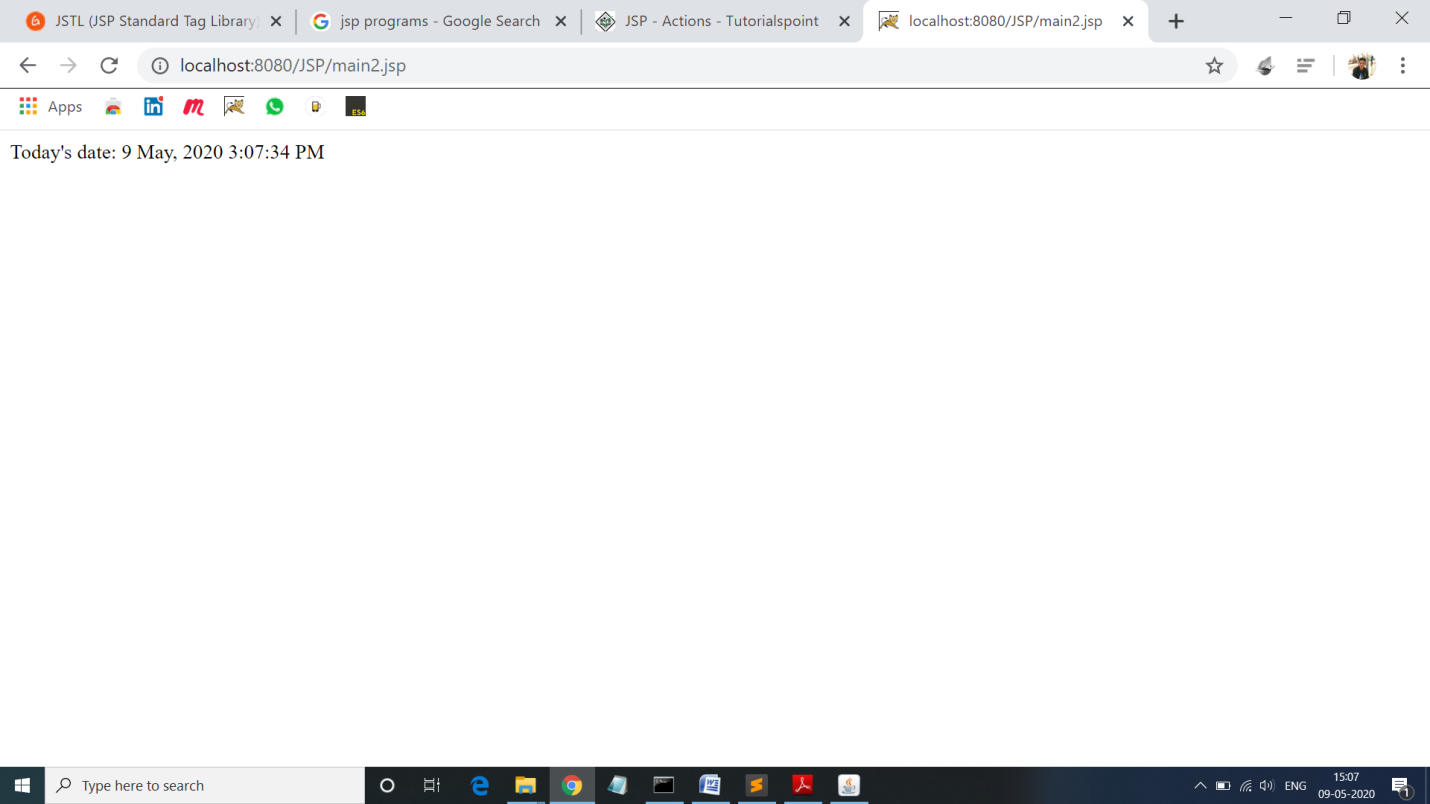
<jsp:forward page = "date2.jsp" />

</center>

</body>

</html>

**Output 15:-**

****

**16.Program for Catch Standard Library.**

**Solution:-**

**Catch.jsp:-**

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">

<title>Core Tag JSP2</title>

</head>

<body>

<c:catch var="Exception">

<% int num = 10/0; %>

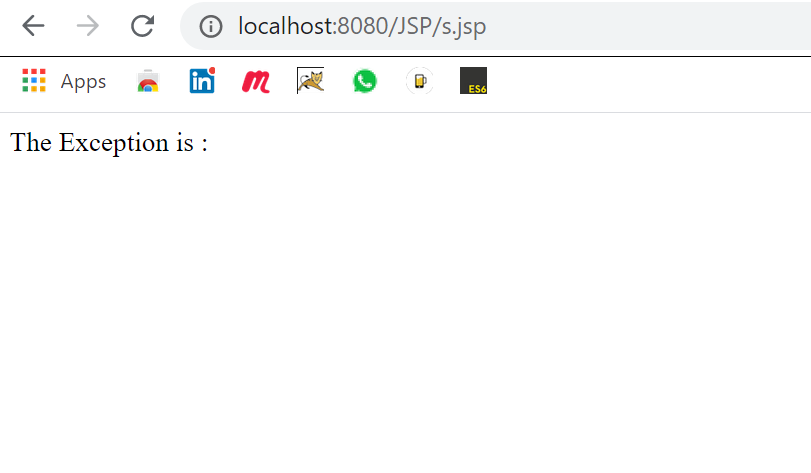
</c:catch>

The Exception is : ${Exception}

</body>

</html>

**Output 16 :-**

****

**17.Program of <c:foreach> standard Tag.**

**Solution:-**

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">

<title>Core Tag JSP4</title>

</head>

<body>

<c:forEach var="count" begin="5" end="10">

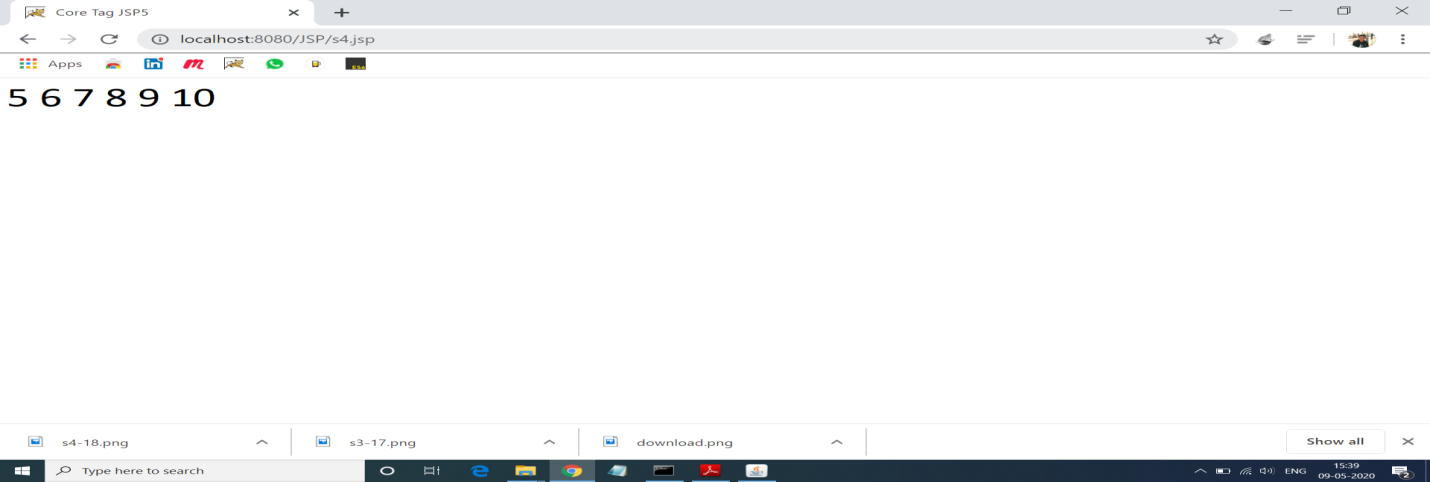
<c:out value="${count}"/>

</c:forEach>

</body>

</html>

**Output 17 :-**

****

**18.Program for <c:if> standard tag.**

**Solution:-**

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">

<title>Core Tag JSP5</title>

</head>

<body>

<c:set var="count" value="100"/>

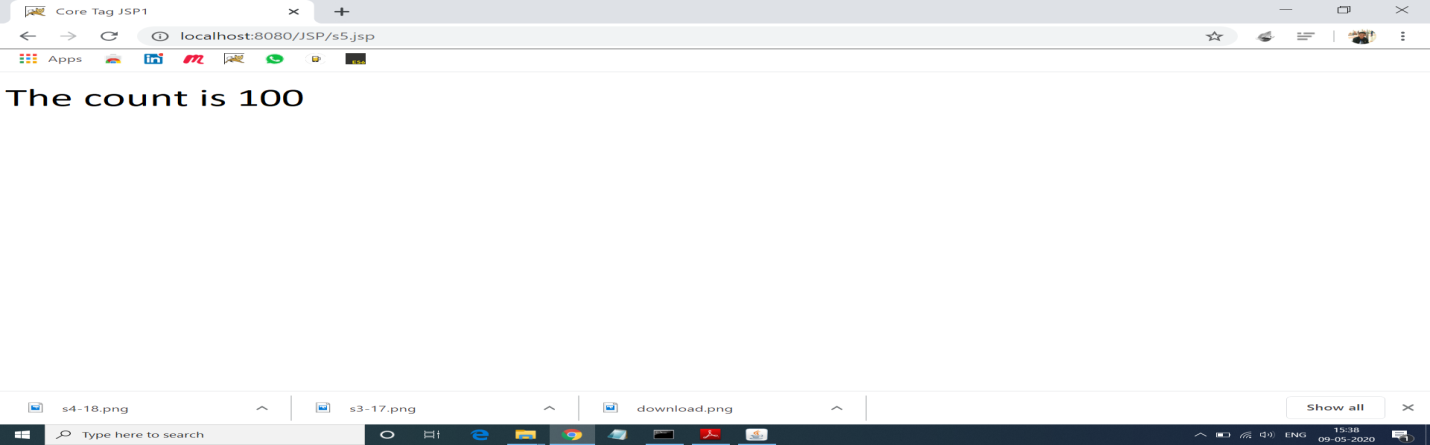
<c:if test="${count == 100}">

<c:out value="The count is 100"/>

</c:if>

</body>

**Output 18:-**

****

**19.Program for <c:import> standard Tag.**

**Solution:-**

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">

<title>Core Tag JSP 31</title>

</head>

<body>

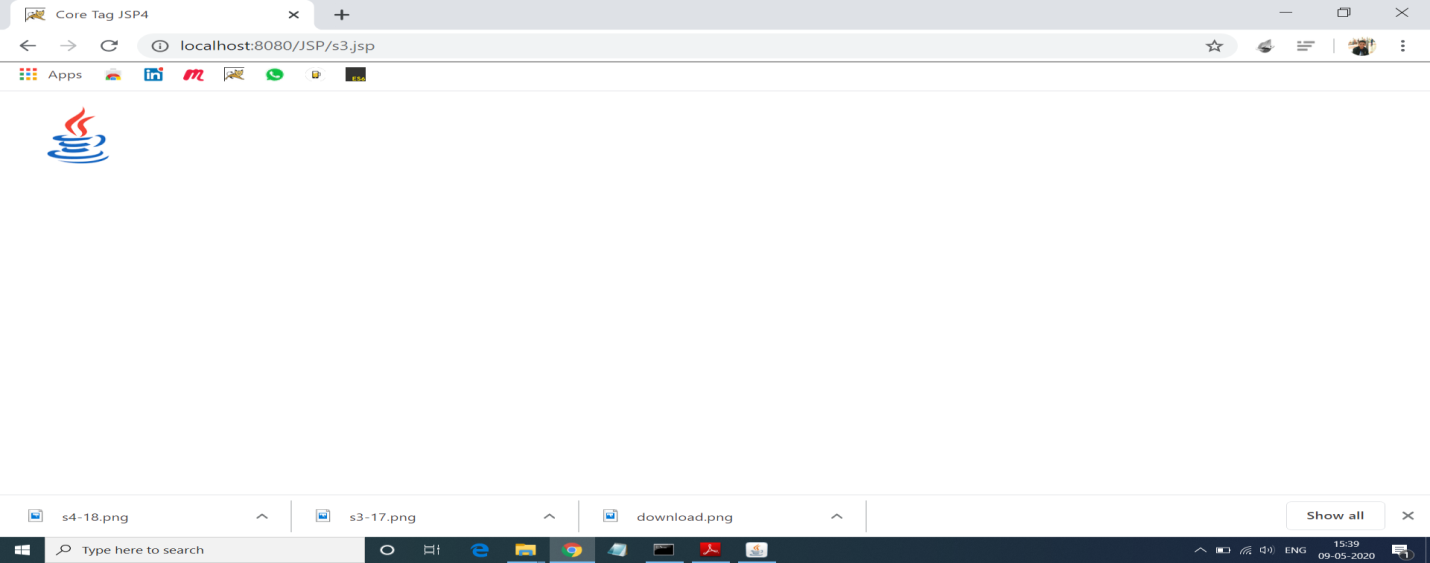
<c:import var="displayfile" url="download.jsp">

</c:import>

<c:out value="${displayfile}"/>

</body>

</html> **Output 19:-**

****

**20.Program for <c:out> standard Tag.**

**Solution:-**

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">

<title>Core Tag JSP1</title>

</head>

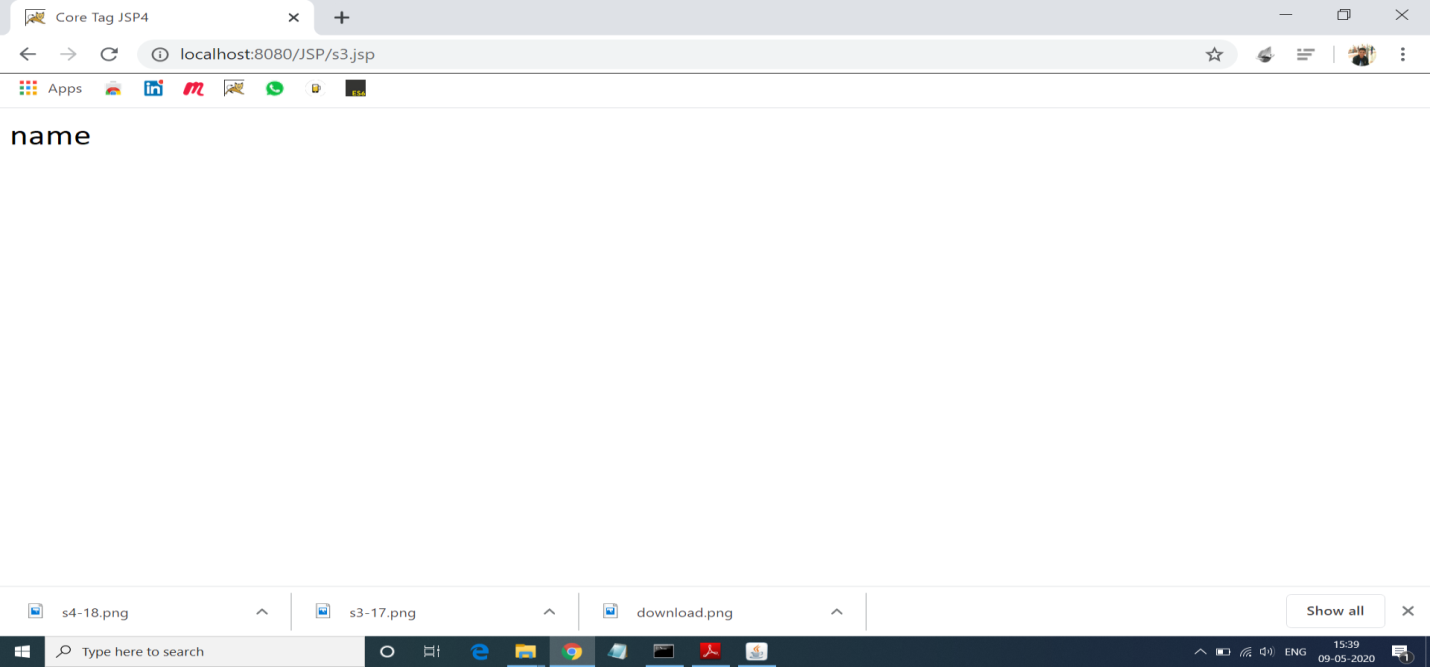
<body>

<c:out value="name">

</c:out>

</body>

</html>**Output 20:-**

****