**1. Implement the following web applications using (a) PHP**

**i. A user validation web application, where the user submits the login name and password to the server. The name and password are checked against the data available in variables and if the data matches, a successful login page is returned. Otherwise a failure message is shown to the user.**

**Login.html**

<html>

<head><title>Login page</title>

</head>

<body>

<center>

<h1>LOGIN FORM</h1>

<form action="verify\_login.php" method="post">

<table>

<tr>

<td><label>USERNAME:</label></td>

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

</tr>

<tr>

<td><label>PASSWORD:</label></td>

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

</tr>

<tr>

<td><input type="submit" value="LOGIN"></td>

<td><input type="reset" valuee="RESET"></td>

</tr>

</table>

</form>

</center>

</body>

</html>

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**verify\_login.php**

<?php

$myxml=simplexml\_load\_file("userlogin.xml");

$uname=$\_REQUEST['uname'];

$pwd=$\_REQUEST['pwd'];

$xmluname="";

$xmlpwd="";

for($i=0;$i<count($myxml);$i++)

{$xmluname=$myxml->user[$i]->uname;

$xmlpwd=$myxml->user[$i]->pwd;

if($xmluname==$uname&&$xmlpwd==$pwd)

{echo"WELCOME $uname!!you have succesfully logged in";

die();

}}

echo "doesnot exist";

?>

**userlogin.xml**

<?xml version="1.0" encoding="utf-8" ?>

<users><user>

<uname>vvvv</uname>

<pwd>123</pwd>

</user>

<user>

<uname>aaaa</uname>

<pwd>abcd</pwd>

</user>

<user>

<uname>hhhh</uname>

<pwd>xyz</pwd>

</user>

</users>

**ii. A simple calculator web application that takes two numbers and an operator (+, -, /, \* and %) from an HTML page and returns the result page with the operation performed on the operands.**

**Calci.html**

<html>

<head>

<title>calculator</title></head>

<br><br><center><h1>Basic calculator</h1><br>

<form method="post" action="insert.php">

<input type="text" name="v1" placeholder="enter a value">

<input type="text" name="v2" placeholder="enter a value">

<input type="submit" name="add" value="+">

<input type="submit" name="sub" value="-">

<input type="submit" name="mul" value="\*">

<input type="submit" name="div" value="/">

<input type="submit" name="mod" value="%">

</form>

</center>

</html>

**Insert.php**

<?php

$x=$\_REQUEST['v1'];

$y=$\_REQUEST['v2'];

if(isset($\_POST['add']))

{$op='+';

$res=($x+$y);

}

elseif(isset($\_POST['sub']))

{ $op='-';

$res=($x-$y);

}

elseif(isset($\_POST['mul']))

{ $op='\*';

$res=($x\*$y);

}

elseif(isset($\_POST['div']))

{ $op='/';

$res=($x/$y);

}

elseif(isset($\_POST['mod']))

{ $op='% ';

$res=($x%$y);

}

$con=mysqli\_connect('localhost',"root","");

$db=mysqli\_select\_db($con,"veda") or die(mysqli\_error());

$query=mysqli\_query($con,"SELECT \* from calci where v1='$x'and v2='$y' and oper='$op'");

$numrows=mysqli\_num\_rows($query);

if($numrows!=0)

{ while($row=mysqli\_fetch\_array($query))

{$val1=$row['v1'];

$val2=$row['v2'];

$oper=$row['oper'];

$result=$row['res'];

}

if($val1==$x&&$val2==$y&&$op==$oper)

{echo '<h1> Theresult is ','',$result,'<h1>';

}}

else

{ $write=mysqli\_query($con,"insert into calci VALUES('$x','$y','$op','$res')");

echo '<h1>inserted and The result is ','',$result,'<h1>';

}?>

**iii. A web application takes a name as input and on submit it shows a hello page where is taken from the request. It shows the start time at the right top corner of the page and provides a logout button. On clicking this button, it should show a logout page with Thank You message with the duration of usage (hint: Use session to store name and time).**

**Sess.html**

<html>

<body><center><h1>LOGIN PAGE</h1><br><br>

<form action="sess.php" method="post">

enter your name:<input type="text" name="uname"><br><br>

<input type="submit" value="login" name="register">

</form></center>

</body>

</html>

**Sess.php**

<?php

session\_start();

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

$\_SESSION['uname']=$name;

$time=time();

$\_SESSION['time']=$time;

echo"<p align='right'>$time</p>";

echo "Hello".$name."!!!.You are logged in successfully";

?>

<form action="log.php" method="post">

<input type="submit" value="logout" name="log">

</form>

**Log.php**

<?php

session\_start();

$nowSince=time()-$\_SESSION['time'];

$name=$\_SESSION['uname'];

echo "<h1> thank you $name!!!</h1>"."the duration of your session is".$nowSince."seconds";

session\_destroy();

?>

**iv. A web application that takes name and age from an HTML page. If the age is less than 18, it should send a page with “Hello , you are not authorized to visit this site” message, where should be replaced with the entered name. Otherwise it should send “Welcome to this site” message.**

**Acces.html**

<html>

<head>

<title>Acess</title></head>

<body>

<br><br><center><h1>User Eligibilty</h1><br>

<form method="post" action="check.php">

<input type="text" name="names" placeholder="enter your name">

<input type="text" name="age" placeholder="enter your age">

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

</form>

</center>

</body>

</html>

**Check.php**

<?php

$age=$\_REQUEST['age'];

$names=$\_REQUEST['names'];

if($age<=18)

{

echo '<h1>Hello',' ',$names,' ',',you are not authorised to visit this site</h1>';

}

else

{echo'<h1>Welcome'.' '.$names.' '.', tothis site</h1>';

}?>

**v. A web application that lists all cookies stores in the browser on clicking “List Cookies” button. Add cookies if necessary.**

**Cookie\_set.php**

<?php

$exp=time()+86400;

setcookie("abc","123",$exp);

setcookie("def","456",$exp);

setcookie("aaa","bbb",$exp);

?>

**Cookie.php**

<center>

<br><br>

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

<input type="submit" value="list cookies" name="list">

</form>

</center>

<?php

error\_reporting(0);

if($\_POST['list'])

{foreach($\_COOKIE as $key=>$val)

{

echo"<center>".$key."is at".$val."<br></center>";

}

}

?>

**2. Implement the following web applications using(b)servlets**

**i. A user validation web application, where the user submits the login name and password to the server. The name and password are checked against the data available in variables and if the data matches, a successful login page is returned. Otherwise a failure message is shown to the user.**

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**ii. A user validation web application, where the user submits the login name and password to the server. The name and password are checked against the data available in xml file and if the data matches, a successful login page is returned. Otherwise a failure message is shown to the user**

**Login.html**

<HTML>

<BODY>

<FORM METHOD="get" ACTION="initparam.java">

<U><B><CENTRE><h1>Login page</h1></CENTRE></B></U>

<BR>

<CENTRE><TABLE>

<TR>

<TD><b>Username:</b></TD>

<TD><INPUT TYPE="text" NAME="uname"></TD>

</TR>

<TR>

<TD><b>password:</b></TD>

<TD><INPUT TYPE="password" NAME="pwd"></TD>

</TR>

<TR>

<TD><INPUT TYPE="submit" value="Login><INPUT

TYPE="reset" value="Reset"></TD>

</TR>

</TABLE>

</CENTRE>

</FORM>

</BODY>

</HTML>

**InitParamServlet.java**

import javax.servlet.\*;

import javax.servlet.http.\*;

import java.io.\*;

public class InitParamServlet extends HttpServlet

{

String u,p;

public void init(ServletConfig config)throws ServletException

{

u=config.getInitParameter("un");

p=config.getInitParameter("pwd");

}

public void doGet(HttpServletRequest req,HttpServletResponse res)throws

ServletException,IOException

{

String un=req.getParameter("uname");

String pass=req.getParameter("pwd");

res.setContentType("text/html");

PrintWriter out=res.getWriter();

if(u.equals(un) && p.equals(pass))

out.println("<h1>Hi"+un+"...<br><center>Successfully Logged into the

system</centre></h1>");

else

out.println("<h1>Hi"+un+"...<br><centre>Invalid Username or

Password</centre></h1>");

}

}

**Web.xml**

<web-app>

<servlet>

<servlet-name> InitParamServlet </servlet-name>

<servlet-class>InitParamServlet</servlet-class>

<init-param>

<param-name>un</param-name>

<param-value>sai</param-value>

</init-param>

<init-param>

<param-name>pwd</param-name>

<param-value>k</param-value>

</init-param>

</servlet>

<servlet-mapping>

<servlet-name> InitParamServlet </servlet-name>

<url-pattern>/ InitParamServlet </url-pattern>

</servlet-mapping>

</web-app>

**iii. A simple calculator web application that takes two numbers and an operator (+, -, /, \* and %) from an HTML page and returns the result page with the operation performed on the operands.**

**Calc.html**

<html>

<head>

<title>Calculator Example</title>

</head>

<body>

<form action="CalcServlet" method="get">

<center>

<h1>Calculator Example</h1>

<br><b>

Enter First Number:

<input type="text" name="t1">

Enter Second Number:

<input type="text" name="t2"><br>

<br>

Select Any Operation:<br>

<table>

<tr>

<td>

<input name="add" type="radio" value="+">+</td>

<td>

<input name="add" type="radio" value="-">-</td>

<td>

<input name="add" type="radio" value="\*">\*</td>

</tr>

<tr>

<td>

<input name="add" type="radio" value="/">/</td>

<td>

<input name="add" type="radio" value="%">%</td>

</tr>

</table>

<br>

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

</center>

</form>

</body>

</html>

**CalcServlet.java**

import javax.servlet.http.\*;

import javax.servlet.\*;

import java.io.\*;

public class CalcServlet extends HttpServlet

{

public void doGet(HttpServletRequest req,HttpServletResponse resp) throws

ServletException,IOException

{

resp.setContentType("text/html");

PrintWriter out=resp.getWriter();

int no1,no2;

String op;

no1=Integer.parseInt(req.getParameter("t1"));

no2=Integer.parseInt(req.getParameter("t2"));

op=req.getParameter("add");

out.println("Number1:"+no1);

out.println("Number2 is:"+no2);

out.println("operator:"+op);

int res=0;

if(op.equals("+"))

res=no1+no2;

if(op.equals("-"))

res=no1-no2;

if(op.equals("\*"))

res=no1\*no2;

if(op.equals("/"))

res=no1/no2;

if(op.equals("%"))

res=no1%no2;

out.println("<h1>Result = "+res+"</h1>");

}

}

}

**Web.xml**

<web-app>

<servlet>

<servlet-name>CalcServlet</servlet-name>

<servlet-class>CalcServlet</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>CalcServlet</servlet-name>

<url-pattern>/CalcServlet</url-pattern>

</servlet-mapping>

</web-app>

**iv. A web application takes a name as input and on submit it shows a hello page where is taken from the request. It shows the start time at the right top corner of the page and provides a logout button. On clicking this button, it should show a logout page with Thank You message with the duration of usage (hint: Use session to store name and time).**

**Session.html**

<html>

<head>

<title>session test</title>

</head>

<body>

<center><h1>HOME PAGE</h1><br>

<form action="session" method="get">

Enter Your Name:<input type="text" name="uname"/><br><br>

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

</form>

</center></body>

</html>

**//session.java**

import java.io.\*;

import java.util.\*;

import javax.servlet.\*;

import javax.servlet.http.\*;

public class session extends HttpServlet

{

public void doGet(HttpServletRequest request,HttpServletResponse response) throws

IOException,ServletException

{

response.setContentType("text/html");

PrintWriter out=response.getWriter();

out.println("<form method=get action=session2>");

Date d=new Date();

out.println("<p align=right>Time:"+d.getTime()+"</p>");

String un=request.getParameter("uname");

HttpSession session=request.getSession();

session.setAttribute("user",un);

session.setAttribute("time",d.getTime());

out.println("Hello"+un);

out.println("<br><br><input type=submit value=logout>");

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

}

}

**//session2.java**

import java.io.\*;

import java.util.\*;

import javax.servlet.\*;

import javax.servlet.http.\*;

public class session2 extends HttpServlet

{

public void doGet(HttpServletRequest request,HttpServletResponse response) throws

IOException,ServletException

{

response.setContentType("text/html");

PrintWriter out=response.getWriter();

HttpSession session=request.getSession();

Date d2=new Date();

String un=(String) session.getAttribute("user");

Long t1=(Long)session.getAttribute("time");

Long t2=d2.getTime();

session.invalidate();

out.println("Thank You"+un+"!!!");

out.println("<br><br>session duration:"+(t2-t1)/(60\*60)+"Seconds");

}

}

**v. A web application that takes name and age from an HTML page. If the age is less than 18, it should send a page with “Hello , you are not authorized to visit this site” message, where should be replaced with the entered name. Otherwise it should send “Welcome to this site” message.**

**Acess.html**

<html>

<head>

<title>Acess</title></head>

<body>

<br><br><center><h1>User Eligibilty</h1><br>

<form method="get" action="check">

<input type="text" name="name" placeholder="enter your name">

<input type="text" name="age" placeholder="enter your age">

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

</form>

</center>

</body>

</html>

**checkage.java**

import java.io.\*;

import java.util.\*;

import javax.servlet.\*;

import javax.servlet.http.\*;

public class checkage extends HttpServlet

{

public void doGet(HttpServletRequest req,HttpServletResponse response) throws

IOException,ServletException

{

response.setContentType("text/html");

PrintWriter out=response.getWriter();

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

String name=req.getParameter("name");

if(age<=18)

{out.println("<h1>Hello"+name+",you r not authorised to visit this site</h1>");

}else

{out.println("<h1>Welcome"+name+",to this site</h1>");

}

}

}

**vi. A web application that lists all cookies stores in the browser on clicking “List Cookies” button. Add cookies if necessary.**

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**3.Write a Program to implement Servlet life Cycle.**

//Java program to show servlet example

// Importing required Java libraries

import java.io.\*;

import javax.servlet.\*;

import javax.servlet.http.\*;

// Extend HttpServlet class

public class AdvanceJavaConcepts extends HttpServlet

{

private String output;

// Initializing servlet

public void init () throws ServletException

{

output = "Advance Java Concepts";

}

// Requesting and printing the output

public void doGet (HttpServletRequest req,HttpServletResponse resp)throws ServletException, IOException

{

resp.setContentType ("text/html");

PrintWriter out = resp.getWriter ();

out.println (output);

}

public void destroy ()

{

System.out.println ("Over");

}

}

Text, letter

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**4.Write a javascript to validate a registration form(textfields,checkbox,radio button,selectbox)**

<html>

<head><title>validating registration form</title></head>

<body>

<script lang="javascript">

function formvalid()

{

var name=document.getElementById("uname").value;

if(name.length==0||name=='')

{

alert("please enter full name");

}

if(!document.getElementById("tel").checked && !document.getElementById("hi").checked && !document.getElementById("tam").checked && !document.getElementById("eng").checked)

{

alert("select a language");

}

if(!document.getElementById("f").checked && !document.getElementById("m").checked && !document.getElementById("o").checked)

{

alert("select a gender");

}

if(document.getElementById("country").value=="")

{

alert("select a country");

}

}

</script>

<h1>REGISTRATION FORM </h1>

<form onsubmit="formvalid()">

NAME:<input type="text" id="uname" size=30></br>

LANGUAGES KNOWN:

English:<input type="checkbox" id="eng">

Hindi:<input type="checkbox" id="hi">

Telugu:<input type="checkbox" id="tel">

Tamil:<input type="checkbox" id="tam"></br>

GENDER:

Female:<input type="radio" name="gender" id="f">

Male:<input type="radio" name="gender" id="m">

Other:<input type="radio" name="gender" id="o"></br>

<select id="country">

<option value="">Country</option>

<option value="1">INDIA</option>

<option value="2">USA</option>

<option value="3">UK</option>

<option value="4">AUSTRALIA</option>

</select></br>

<input type="submit">

</form>

</body>

</html>

function RegistrationValidate(){

    var registrationFirstName = document.getElementById("registrationFirstName").value;

    var registrationMiddleName = document.getElementById("registrationMiddleName").value;

    var registrationLastName = document.getElementById("registrationLastName").value;

    if(registrationFirstName.length==0||registrationFirstName==''||registrationMiddleName.length==0||registrationMiddleName==''||registrationLastName.length==0||registrationLastName==''){

        alert("Enter valid name");

    }

    if(!document.getElementById("English").checked &&!document.getElementById("Hindi").checked &&!document.getElementById("Telugue").checked){

        alert("Select a Language");

    }

    var registrationMail=document.getElementById("registrationEmail").value;

    var registrationPassword=document.getElementById("registrationaPassword").value;

    if(registrationMail.length<10){

        alert("invalid Mail");

    }

    if(registrationPassword.length<8){

        alert("password must be greater than 8 charecters");

    }

    //Gender

    if(!document.getElementById("Male").checked==true&&!document.getElementById("Female").checked==true&&!document.getElementById("Other").checked==true){

        alert("Select a gender");

    }

    var registrationadd=document.getElementById("registrationadd").value;

    if(registrationadd.length==0){

        alert("Enter valid address");

    }

    2107

    var registrationphone=document.getElementById("registrationPhone").value;

    if(registrationphone.length<10){

        alert("Enter valid Phone number");

    }

    if(isNaN(registrationphone)){

        alert("Phone number must be only a number");

    }

}

**5.Write a php program to read data from file upload.**

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**6.Write a javascript to handle Mouse and Keyboard event handlers.**