SRI VENKATESWARA COLLEGE OF ENGINEERING AND TECHNOLOGY

(AUTONOMOUS)

(Affiliated to JNTUA, Ananthapuramu, Approved by AICTE, New Delhi,

Accredited by NBA,Accredited by NAAC with A Grade, Bengaluru)

R.V.S. Nagar, CHITTOOR – 517 127, A.P, www.svcetedu.org,

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

17ACS44 - Web Technologies Lab

SRI VENKATESWARA COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS)

	L	T	P	C
III B.Tech II Semester -CSE	**-**	**-**	**3**	**1.5**

Code : 17ACS44 **Web Technologies Lab**

Objectives:

To develop web pages.
To program Client side scripting languages
To access Database connectivity

Outcomes:

At the end of the course the student will be able to
Develop web pages.
Program Client side scripting languages
Develop database connectivity

LIST OF EXPERIMENTS

Week 1:

1. Develop a static web page that demonstrates basic HTML tags.

Week 2:

2. Develop a web page to demonstrate different types of CSS.

Week 3:

3. Design an XML document to structure the student data and validate using DTD.

Week 4:

4. Design an XML document to structure and display the data using an XSL.

Week 5:

5 .Write an XML file which will display the Book information which includes the following:
Title of the book
Author Name
ISBN number
Publisher name
Edition
Price

Write a Document Type Definition (DTD) to validate the above XML file.

Display the XML file as follows. The contents should be displayed in a table. The header of the table should be in color GREY. And the Author names column should be displayed in one color and should be capitalized and in bold. Use your own colors for remaining columns. Use XML schemas XSL and CSS for the above purpose.

Note: Give at least for 4 books. It should be valid syntactically.

Hint: You can use some xml editors like XML,spy

Week 6:

Install TOMCAT web server. Convert the static web pages of assignments 2 into dynamic web pages using servlets and cookies. Hint: User's information (user id, password, credit card number) would be stored in web. Xml. Each user should have a separate shopping cart

Week 7:

Develop a web application using Java script to perform the following tasks: a. Registration validation

b. User login

c. User profile and credit card payment.

Week 8:

Develop and demonstrate a XHTML file that includes JavaScript scripts for the following problems:

a) Input: A number n obtained using prompt

Output: The first n Fibonacci numbers

b) Input: A number n obtained using prompt

Output: A table of numbers from 1 to n and their squares using alert

Week 9:

9 .Write a PHP program to store current date,time in a COOKIE and display the 'Last visited on' date,time on the web page upon reopening of the same page.

Week 10:

10.Write a PHP program to store page views count in SESSION, to increment the count on each refresh, and to show the count on the web page.

Week 11:

11.Create tables in the database which contain the details of items (books in our case like Book name

Price, Quantity, Amount) of each category. Modify your catalogue page (week 2)in such a way that you should connect to the database and extract data from the tables and display them in the catalogue page using PHP

Week 12:

12.Using PHP and MySQL, develop a program to accept book information viz. Accession number, title, authors, edition and publisher from a web page and store the information in a database and to search for a book with the title specified by the user and to display the search results with proper headings.

Contents

	your catalogue page (week 2)in such a way that you should connect to the database and extract data from the tables and display them in the catalogue page using PHP	
12	Using PHP and MySQL, develop a program to accept book information viz. Accession number, title, authors, edition and publisher from a web page and store the information in a database and to search for a book with the title specified by the user and to display the search results with proper headings.	20/7/21

WEEK 1

Aim:- Develop a static web page that demonstrates basic HTML tags.

Procedure:-
1. Open notepad to enter HTML files
2. Type source code and save as <filename>.html
3. Run this file from internet explorer (Google chrome/Mozilla/Internet Explorer).

Practice 1

Introduction to HTML. Create a basic HTML file

Hyper Text Markup Language is a set of logical codes (markup) in parentheses that constitute the appearance of a web document and the information it contains. It is a language for creating static web pages. It specifies how the contents are to be presented on the web page. HTML is not a case sensitive language so; HTML and html both are same.

HTML is a text document with formatting codes and this document has the suffix ".html" or ".htm".

Basic HTML Document

An element called HTML surrounds the whole document. This element contains two sub-elements,

HEAD and BODY. These elements are required to form any HTML document.

```
<Html>
     <Head>
          <Title>The First Page</title>
     </head>
     <Body>
          Hello World
     </body>
</html>
```

Just write down above code in the notepad editor and save this file with the extension of .html or .htm and then double click on that file you will get output on the default web browser.

OUTPUT
Hello World

Practice 2

Create a static webpage using table tags of HTML

```
<html>
<body>
<TABLE BORDER="1" CELLPADDING="2">
```

```
<CAPTION ALIGN="Top"><b>III B.Tech., II Semester <CAPTION>
<TR>

<TH ROWSPAN="2">Course Code </TH>
<TH ROWSPAN="2">Course Name </TH> <TH ROWSPAN="2">Subject Area </TH>
<TH Colspan="3">Periods per week </TH>
<TH ROWSPAN="2">Credits</TH>
<TR>
<TD>L </TD>
<TD>T </TD>
<TD>P </TD>

</TR>
<TD> <center>17ACS31</TD>
<TD> Compiler Design </TD>
<TD><center>PC</TD>
<TD><center>3</TD>

<TD><center>1</TD>
<TD><center>-</TD>
<TD><center>3</TD>
</TR>
<TR>
<TD> <center>17ACS32</TD>
<TD> Big data Analytics </TD>
<TD><center>PC</TD>
<TD><center>3</TD>

<TD><center>1</TD>
<TD><center>-</TD>
<TD><center>3</TD>
</TR>

<TR>
<TD> <center>17ACS33</TD>
<TD> Cryptography and Network Security </TD>
<TD><center>PC</TD>
<TD><center>3</TD>

<TD><center>1</TD>
<TD><center>-</TD>
<TD><center>3</TD>
</TR>
<TR>
<TD> <center>17ACS34</TD>
<TD> Web Technologies </TD>
<TD><center>PC</TD>
<TD><center>3</TD>

<TD><center>1</TD>
<TD><center>-</TD>
<TD><center>3</TD>

</TR>
```

```
</TABLE>
</body>
</html>
```

OUTPUT

III B.Tech., II Semester Course Code	Course Name	Subject Area	Periods per week			Credits
			L	T	P	
17ACS31	Compiler Design	PC	3	1	-	3
17ACS32	Big data Analytics	PC	3	1	-	3
17ACS33	Cryptography and Network Security	PC	3	1	-	3
17ACS34	Web Technologies	PC	3	1	-	3

Practice 3:-

Create a static web page which defines all text formatting tags of HTML in tabular format

```
<html>
<body>
      <center>
      <table border=1>
      <caption align="top"><font size="+2" color="red">Text
Formatting Tags</font></caption>
      <tr>

            <th>HTML Tag</th>
            <th>Output</th>
      </tr>
      <tr>
            <td>normal text</td>
            <td>hello world</td>
      </tr>
      <tr>
            <td>Font & its attributes</td>
            <td><FONT SIZE="+2" COLOR="#RRGGBB"> hello
world </FONT></td>
      </tr>
      <tr>
            <td>&lt;B&gt;</td>
            <td><B> Bold </B></td>
      </tr>
      <tr>
            <td>&lt;I&gt;</td>
            <td><I> Italic </I></td>
      </tr>
      <tr>
            <td>&lt;U&gt;</td>
            <td><U> Underline </U></td>
      </tr>
      <tr>
            <td>&lt;EM&gt;</td>
            <td><EM> Emphasis </EM></td>
      </tr>
      <tr>
            <td>&lt;STRONG&gt;</td>
            <td><STRONG> STRONG </STRONG></td>
```

```
	</tr>
	<tr>
		<td>&lt;TELETYPE&gt;</td>
		<td><TT> TELETYPE </TT></td>
	</tr>
	<tr>
		<td>&lt;CITE&gt;</td>
		<td><CITE> Citation </CITE></td>
	</tr>
	<tr>
		<td>&lt;STRIKE&gt;</td>
		<td><STRIKE> strike-through text </STRIKE></td>
	</tr>
	<tr>
		<td>&lt;BIG&gt;</td>
		<td><BIG> text in a big font </BIG></td>
	</tr>
	<tr>
		<td>&lt;SMALL&gt;</td>
		<td><SMALL> text in a small font <SMALL></td>
	</tr>
	<tr>
		<td>&lt;SUB&gt;</td>
		<td>a<SUB> b </SUB></td>
	</tr>
	<tr>
		<td>&lt;SUP&gt;</td>
		<td>a<SUP> b</SUP></td>
	</tr>
	</table>
</body>
</html>
```

OUTPUT

Text Formatting Tags

HTML Tag	Output
normal text	hello world
Font & its attributes	hello world
<B>	**Bold**
<I>	*Italic*
<U>	Underline
<EM>	*Emphasis*
<STRONG>	**STRONG**
<TELETYPE>	TELETYPE
<CITE>	*Citation*
<STRIKE>	~~strike-through text~~
<BIG>	text in a big font
<SMALL>	text in a small font
<SUB>	a_b
<SUP>	a^b

Practice 4

Create webpage using list tags of HTML

```
<html>
<body background="Desert.jpg">
<center><img src="dns.gif">
      <b> HTML List: Ordered, Unordered & Definition
      List</b> <hr>

Following is the list of proposed student activities like:

<OL type=1>
            <li>Develop programs related with unit vice topics
in computer laboratory.</li>
            <li>Develop any module of to be useful in real life
            application.</li>
            <li>Multimedia presentation of module developed
            by students.</li>
</OL>
      <hr>

List of Software/Learning Websites

<UL>
            <li><u>ASP Tutorial - W3Schools</u><br>
                  <a
                  href=http://www.w3schools.com/asp/>
                  www.w3schools.com/asp</a></li>
            <li><u>Classic ASP Tutorials & Articles - Web Wiz</u><br>
                  <a   href="http://www.webwiz.co.uk">www.webwiz.co.uk
                  - Knowledgebase</a></li>
            <li><u>HTML Tutorial - W3Schools</u><br>
                  <a href="http://www.w3schools.com/html/">
      www.w3schools.com/html</a></li>
            <li><u>CSS Tutorial</u><br>
                  <a
                        href="http://www.csstutorial.net
                        /"> www.csstutorial.net</a></li>
            <li><u>VBScript Tutorial - Tutorials
            Point</u><br> <a
href="http://www.tutorialspoint.com/vbscript/index.htm">
            www.tutorialspoint.com/vbscript/index.htm</a></li>
            <li><u>ADO Tutorial - W3Schools</u><br>
                  <a href="http://www.w3schools.com/ADO/default.asp">
                        www.w3schools.com/ADO/default.asp</a></li>
</UL>
      <hr>

<DL>
            <DT>HTML</DT>
                  <DD>Hyper Text Markup
            Language</DD> <DT>XML</DT>
                  <DD>eXtensible Markup Language</DD>
</DL>
</body>
</html>
```

OUTPUT

HTML List: Ordered,Unordered & Definition List

Following is the list of proposed student activities like:

1. Develop programs related with unit vice topics in computer laboratory.
2. Develop any module of to be useful in real life application.
3. Multimedia presentation of module developed by students.

List of Software/Learning Websites

- ASP Tutorial - W3Schools
  www.w3schools.com/asp
- Classic ASP Tutorials & Articles - Web Wiz
  www.webwiz.co.uk - Knowledgebase
- HTML Tutorial - W3Schools
  www.w3schools.com/html
- CSS Tutorial
  www.csstutorial.net
- VBScript Tutorial - Tutorials Point
  www.tutorialspoint.com/vbscript/index.htm
- ADO Tutorial - W3Schools
  www.w3schools.com/ADO/default.asp

HTML
: Hyper Text Markup Language

XML
: eXtensible Markup Language

Result: - Thus, HTML programs has been written to develop a static web page that demonstrates basic HTML tags and its output was verified

WEEK 2

Aim:- Develop a web page to demonstrate different types of CSS.

Procedure:-

1. Open notepad to enter HTML and CSS files
2. Type source code and save as <filename>.html for html files and type source code and save as <filename>.css for style specified files (CSS)
3. Run this HTML file from internet explorer (Google chrome/Mozilla/Internet Explorer).

Practice 1:-

css.html

```
<html>
<head> <h1 align=center> Web Page using CSS </h1>
<style type="text/css">
body{background-image:url(svcet2.jpg); background-repeat:no-repeat;}
p{color:yellow ;font-size:20pt;font-family:chiller;background-image:url(svcet1.jpg);}
a:hover{font-size:20pt;background-color:yellow;cursor:crosshair;}
a:link{font-size:20pt;background-color:white;}
a:active{font-size:20pt;background-color:cyan;cursor:help;}
a:visited{font-size:20pt;background-color:tan;} </style>

</head>
<title> CSS Webpage!!! </title>
<body>
<br>

<p> Welcome to Web page using CSS where CSS means Cascading Style Sheets! using CSS we can apply the common styles to different tags and also different styles to same tag i.e. repeated more than once in the html file </p> <a href="pex1.html"><center> Register </center.</a> <br><br><br><br><br><br><br><br><br><br>
<center><div style="position:relative;font-size:50px;z-index:2;">LAYER 1</div>
<div style="position:relative;top:-50;left:5;color:red;font-size:80px;z-index:3;">LAYER 3</div>
<div style="position:relative;font-size:50px;z-index:3;">LAYER 1</div>
<div style="position:relative;top:-50;left:5;color:red;font-size:80px;z-index:4;">LAYER 2</div> </center>
</body>
</html>
```

Output

Practice 2:-

Apply style sheet in Web page. [inline, embedded and linked]

- **ext.css**

```
hr
{
      color:sienna;
}
p
{
      margin-left:20px;
}
body
{
      background-image:url("sheet.jpg");
}
```

- **stylesheet.html**

```
<html>
      <head>
      <link rel="stylesheet" type="text/css" href="ext.css"> <style>
      h1
      {
            background-color:#6495ed;
      }
      p
      {
            background-color:#e0ffff;
      }
      div
      {
            background-color:#b0c4de;
      }
      </style>
      </head>
      <body>

            <h2>Internal, External & Inline Style!</h1> <div>Text
            inside a div element.
                  <p>paragraph background color</p>
                  still in the div element.
            </div>
      <p style="color:red;margin-left:20px;">Hello world.</p> </body>
</html>
```

Output

Internal, External & Inline Style!

Text inside a div element.

paragraph background color

still in the div element.

Hello world.

Result: - Thus, HTML and CSS programs have been written to develop a web page to demonstrate different types of CSS and its output was verified

WEEK 3

Aim:- XML document to structure the student data and validate using DTD

Procedure:-

1. Open notepad to enter XML and DTD files
2. Type source code and save as <filename>.xml for html files and type source code and save as <filename>.dtd for Document Type Definition (DTD)
3. Run this XML file from internet explorer (Google chrome/Mozilla/Internet Explorer).

Practice 1:-

Internal DTD validation

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE customer [
<!ELEMENT customer (firstname, lastname, companyname, email, message)>
<!ELEMENT firstname (#PCDATA)>
<!ELEMENT lastname (#PCDATA)>
<!ELEMENT companyname (#PCDATA)>
<!ELEMENT email (#PCDATA)>
<!ELEMENT message (#PCDATA)>
]>
<customer>
 <firstname>John</firstname>
 <lastname>Doe</lastname>
 <companyname>Section</companyname>
 <email>johndoe@section.io</email>
 <message>Welcome message</message>
</customer>
```

OUTPUT

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE customer>
<customer><firstname>John</firstname><lastname>Doe</lastname><companyname>Section</companyname><email>johndoe@section.io</email><message>Welcome message</message></customer>
```

Practice 2:-

External DTD validation

validation.dtd

```
<!ELEMENT customer (firstname, lastname, companyname, email, message)>
<!ELEMENT firstname (#PCDATA)>
<!ELEMENT lastname (#PCDATA)>
```

```
<!ELEMENT companyname (#PCDATA)>
<!ELEMENT email (#PCDATA)>
<!ELEMENT message (#PCDATA)>
```

Lab3.xml

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE customer SYSTEM "validation.dtd">
<customer>
  <firstname>John</firstname>
  <lastname>Doe</lastname>
  <companyname>Section</companyname>
  <email>johndoe@section.io</email>
  <message>Welcome message</message>
</customer>
```

OUTPUT

```
<customer>
<firstname>John</firstname>
<lastname>Doe</lastname>
<companyname>Section</companyname>
<email>johndoe@section.io</email>
<message>Welcome message</message>
</customer>
```

Result: - Thus, HTML and CSS programs have been written to develop a web page to demonstrate different types of CSS and its output was verified

Week 4

Aim:- Design an XML document to structure and display the data using an XSL.

Procedure:-

1. Open notepad to enter XML and XSL files
2. Type source code and save as <filename>.xml for html files and type source code and save as <filename>.dtd for Extensible Style sheet Language (XSL)
3. Run this XSL file from internet explorer (Google chrome/Mozilla/Internet Explorer).

Lab4.xml

```
<?xml version="1.0" encoding="utf-8" ?> <?xml-stylesheet type="text/xsl" href="Lab4.xsl" ?>
<stud>
<title>week 4</title>
<usn>4MH09IS058</usn>
<name>Vishwesh M</name>
<coll>SVCET</coll>
<branch>CSE</branch>
<yoj>2021</yoj>
<eid>vishu363@gmail.com</eid>
</stud>
```

Lab4.xsl

```
<?xml version="1.0" encoding="utf-8"?> <xsl:stylesheet version="1.0"
xmlns:xsl="http://www.w3.org/1999/XSL/Transform" xmlns="http://www.w3.org/1999/xhtml">
<xsl:template match="/">
<span style="font-size:20pt;color:blue"> ===> </span> <span><xsl:value-of select="stud/title" /><br
/></span>
<span style="font-size:20pt;color:blue">Usn      :</span>

<span><xsl:value-of select="stud/usn" /><br /></span> <span style="font-
size:20pt;color:blue">Name :</span> <span><xsl:value-of select="stud/name" /><br/></span>

<span style="font-size:20pt;color:blue">Branch :</span>

<span><xsl:value-of select="stud/branch" /><br /></span>

<span style="font-size:20pt;color:blue">Yoj      :</span>

<span><xsl:value-of select="stud/yoj" /><br /></span> <span style="font-
size:20pt;color:blue">college:</span>

<span><xsl:value-of select="stud/coll" /><br /></span>

</xsl:template>
</xsl:stylesheet>
```

Output

===> XML document to structure and display the data using an XSL

Usn :18781A0569

Name :Vishwesh M

Branch :CSE

Yoj :2021

college:SVCET

Result: - Thus, XML and XSL programs have been written to develop a web page to design an XML document to structure and display the data using an XSL and its output was verified.

Week 5

Aim:- Write an XML file which will display the Book information which includes the following:

Title of the book
Author Name
ISBN number
Publisher name
Edition
Price

and to validate this XML file by Document Type Definition (DTD).

Procedure:-

1. Open notepad to enter XML, XSL, XSD and DTD files
2. i) Type source code and save as <filename>.xml for xml files
   ii) Type source code and save as <filename>.dtd for Document Type Definition (DTD).
   iii) Type source code and save as <filename>.xsd for XML Schema Definition.
   iv) Type source code and save as <filename>.xsl for Extensible Style Sheet Language(XSL).
3. Run this XML/XSL file from internet explorer (Google chrome/Mozilla/Internet Explorer).

Description

Extensible Markup Language (XML) is a meta-markup language that provides a format for describing structured data. This facilitates more precise declarations of content and more meaningful search results across multiple platforms. In addition, XML is enabling a new generation of Web-based data viewing and manipulation applications.

In the HTML you use tags to tell the browser to display data as bold or italic; in XML you use tags only to describe data, such as city name, temperature, and barometric pressure. In XML, you use style sheets such as Extensible Stylesheet Language (XSL) and Cascading Style Sheets (CSS) to present the data in a browser. XML separates the data from the presentation and the process, enabling you to display and process the data as you wish by applying different style sheets and applications.

Source Code

Practice 1:-

Demonstrating DTD

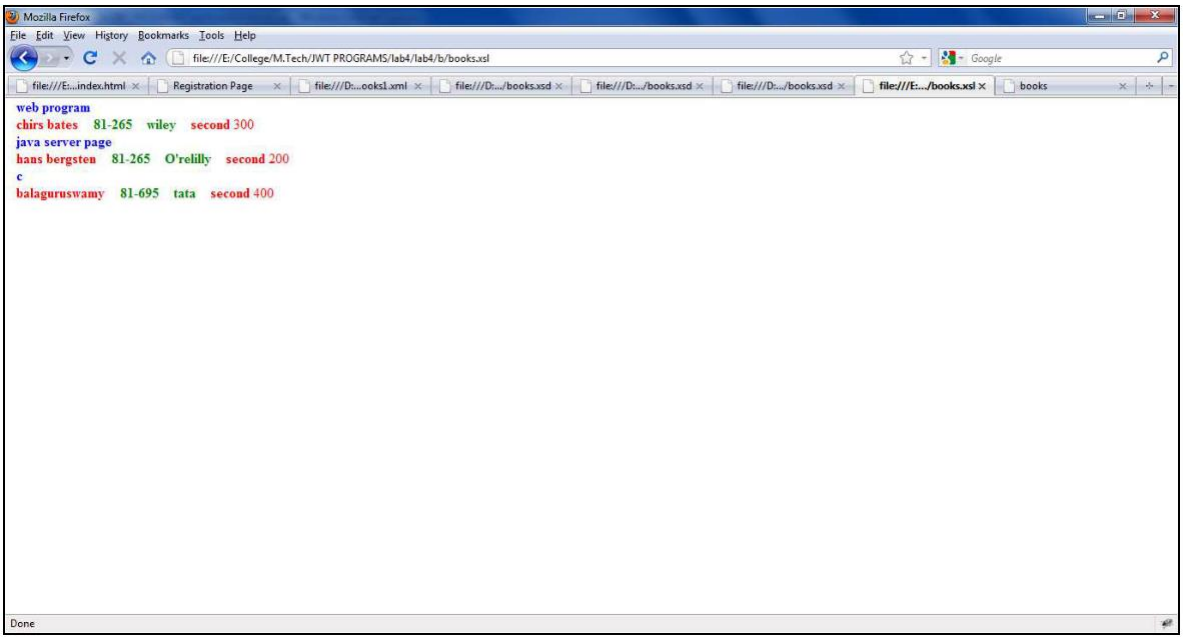
book.dtd

```
<!ELEMENT BOOKS (book)>
<!ELEMENT book (title, auther, ISBNnumber, publishername, editior, price)>
<!ELEMENT title (#PCDATA)>
<!ELEMENT auther (#PCDATA)>
<!ELEMENT ISBNnumber (#PCDATA)>
<!ELEMENT publishername (#PCDATA)>
<!ELEMENT editor (#PCDATA)>
<!ELEMENT price (#PCDATA)>
```

Books1.xml

```
<?xml version="1.0" ?>
```

```
<!DOCTYPE books SYSTEM "books.dtd">
<books>

<book>
<title>java server page</title>
<author>hans bergsten</author>
<isbn>81-265</isbn>
<publisher>O'relilly</publisher>
<edition>second</edition>
<price>200</price>
</book>

<book>
<title>c</title>
<author>balaguruswamy</author>
<isbn>81-695</isbn>
<publisher>tata</publisher>
<edition>second</edition>
<price>400</price>
</book>

<book>
```




```
<title>web program</title>
<author>chirs bates</author>
<isbn>81-265</isbn>
<publisher>wiley</publisher>
<edition>second</edition>
<price>300</price>
</book>
</books>
```

Output

Demonstrating DTD

Practice 2:-

Demonstrating XSD

books.css

```
books
{
color:orange;
}
book
{
color:Red;
}

title
{
color:blue;
font-weight:bold;
margin-left:10pt;
display:block;
}

author
{
color:red;
font-weight:bold;
margin-left:10pt;
}

isbn
{
color:green;
font-weight:bold;
margin-left:10pt;
}

edition
{
color:red;
font-weight:bold;
margin-left:10pt;
}

publisher
{
color:green;
font-weight:bold;
margin-left:10pt;
}
```

Books.xsd

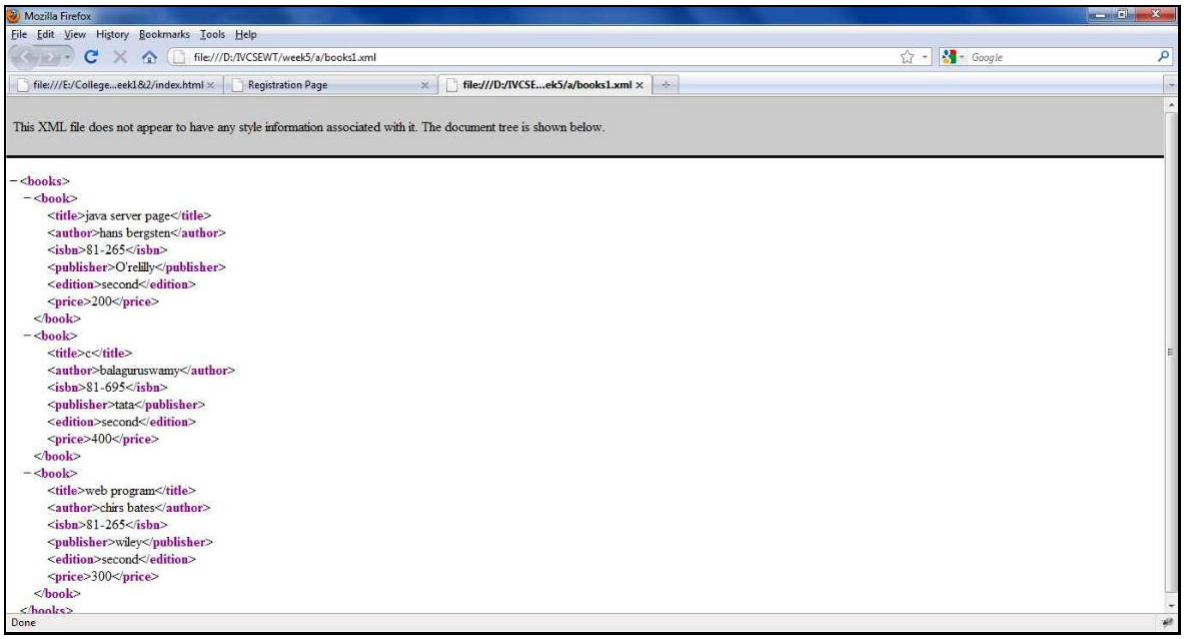
```
<?xml version="1.0" encoding="iso-8859-1" ?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
<xs:element name="books">
<xs:complexType>
<xs:sequence>
<xs:element name="book" minOccurs="1" maxOccurs="unbounded"/>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="book">
<xs:complexType>
<xs:sequence>
<xs:element ref="title" minOccurs="1" maxOccurs="1"/>
<xs:element ref="auther" minOccurs="1" maxOccurs="1"/>
<xs:element ref="isbn" minOccurs="1" maxOccurs="1"/>
<xs:element ref="publisher" minOccurs="1" maxOccurs="1"/>
<xs:element ref="edition" minOccurs="1" maxOccurs="1"/>
<xs:element ref="price" type="xs:string" minOccurs="1" maxOccurs="1"/>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="title" type="xs.string"/>
<xs:element name="auther" type="xs.string"/>
<xs:element name="isbn" type="xs.string"/>
<xs:element name="publisher" type="xs.string"/>
<xs:element name="edition" type="xs.string"/>
<xs:element name="price" type="xs.string"/>
</xs:schema>
```

Books.xsl

```
<?xml version="1.0"?>
<?xml-stylesheet type="text/css" href="books.css"?>
<books xmlns:xsi="http:www.w3.org/2001/xmlschema-instance"
xsi:noNamespaceSchemaLocation="books.xsd">
<book>
<title>web program</title>
<author>chirs bates</author>
<isbn>81-265</isbn>
<publisher>wiley</publisher>
<edition>second</edition>
<price>300</price>
</book>

<book>
<title>java server page</title>
<author>hans bergsten</author>
<isbn>81-265</isbn>
<publisher>O'relilly</publisher>
<edition>second</edition>
<price>200</price>
```

```
</book>

<book>
<title>c</title>
<author>balaguruswamy</author>
<isbn>81-695</isbn>
<publisher>tata</publisher>
<edition>second</edition>
<price>400</price>
</book>
</books>
```

Output **Demonstrating XSD**



Practice 3:-

Demonstrating XSL
books.xsl

```
<?xml version="1.0" encoding="iso-8859-1"?>
<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
<xsl:template match="/">
<html>
<head>
<title> books</title></head>
<body>
<table border="1">
<tr><th>title</th>
```

```
<th> auther</th>
<th> isbn</th>
<th>publisher</th>
<th>edition</th>
<th>price</th>
</tr>
<xsl:for-each select="/books/book">
<tr>
<td bgcolor="green"><xsl:value-of select="title"/></td> <td bgcolor="red"><xsl:value-of
select="author"/></td> <td bgcolor="cyan"><xsl:value-of select="isbn"/></td>
<td bgcolor="yellow"><xsl:value-of select="publisher" /></td>
<td bgcolor="silver"><xsl:value-of select="edition" /></td>
<td bgcolor="blue"><xsl:value-of select="price" /></td>
</tr>

</xsl:for-each>
</table>
</body>
</html>
</xsl:template>
</xsl:stylesheet>
```

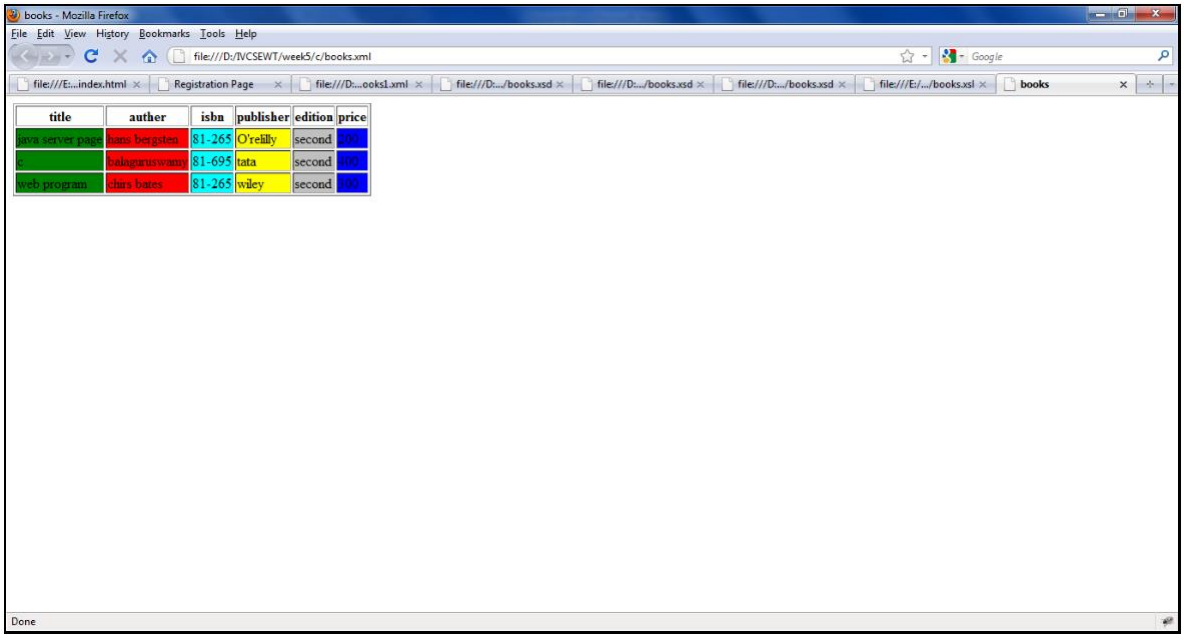
Books3.xml

```
<?xml version="1.0"?>
<?xml-stylesheet type="text/xsl" href="books.xsl"?>
<books>
<book>
<title>java server page</title>
<author>hans bergsten</author>
<isbn>81-265</isbn>
<publisher>O'relilly</publisher>
<edition>second</edition>
<price>200</price>
</book>

<book>
<title>c</title>
<author>balaguruswamy</author>
<isbn>81-695</isbn>
<publisher>tata</publisher>
<edition>second</edition>
<price>400</price>
</book>

<book>
<title>web program</title>
<author>chirs bates</author>
<isbn>81-265</isbn>
<publisher>wiley</publisher>
<edition>second</edition>
<price>300</price>
</book>
```

</books>

Output

Demonstrating XSL



Result: - Thus, XSL,XML,XSD,DTD programs have been written to validate this XML file by DTD, XSD and XSL and its output was verified.

WEEK 6

Aim:- Install TOMCAT web server and Convert the static web pages into dynamic web pages using servlets and cookies.

Procedure :-

(i) Install TOMCAT web server. [We Use Xampp Package that includes Apache TOMCAT]
(ii) Install JDK .
(iii) To compile a **Servlet** a **JAR** file is required. In Apache Tomcat server servlet-api.jar file is required to compile a servlet program so, download and save it under lib folder of JAVA_HOME
(iv) Setup all environment variable to compile regular java programs using the command prompt. That must be pointed to lib folder of jdk.

Setup JAVA_HOME at your environment variable that must be point to your java folder.

Setup CATLINA_HOME at your environment variable that must be point to tomcat folder.

(That's inside the xampp folder. Xampp is in C:\)

(v) Generate Class file for Servlet Java Program.

Compile java servlet program and generate the class file. Use javac command to generate the class file. It requires the servlet-api.jar file to create the class file. It's in the lib of tomcat so if you use the xampp its path is like this "C:\xampp\tomcat\lib\servlet-api.jar" after that give your java file path. So syntax of class file generation is like this – "javac –cp C:\xampp\tomcat\lib\servlet-api.jar [path of your java file]". Class file will be generated at the same location of your java file.

(vi) Copy and paste the Created Class File.

Now copy the generated class file to classes folder of tomcat server. Path is like this

"C:\xampp\tomcat\webapps\examples\WEB-INF\classes"

(vii) Need to do in the web.xml file and where that is file

Now edit web.xml file. Which is at the very back folder of classes.

"C:\xampp\tomcat\webapps\examples\WEB-INF"

(viii) Access My Class File

Now start tomcat server by pressing CATLINA_START.bat file

Open the browser and Run the program. Url will be like this http://localhost:8080/….

Hello.html

```
<html>
<body>
<form action = "http://localhost:8080/examples/servlets/HelloForm" method = "GET">
User ID: <input type = "text" name = "userid">
<br />
PASSWORD: <input type = "password" name = "password" />
<br />
Credit Card: <input type = "text" name = "creditcard" />
<input type = "submit" value = "Submit" />
</form>
```

```
</body>
</html>
```

HelloForm.java

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

// Extend HttpServlet class
public class HelloForm extends HttpServlet {

  public void doGet(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {

    // Create cookies for first and last names.
    Cookie userid  = new Cookie("userid", request.getParameter("userid"));
    Cookie password = new Cookie("password", request.getParameter("password"));
 Cookie creditcard = new Cookie("creditcard", request.getParameter("creditcard"));
    // Set expiry date after 24 Hrs for both the cookies.
    userid.setMaxAge(60*60*24);
    password.setMaxAge(60*60*24);
creditcard.setMaxAge(60*60*24);
    // Add both the cookies in the response header.
    response.addCookie( userid );
    response.addCookie( password );
 response.addCookie( creditcard );
    // Set response content type
    response.setContentType("text/html");

    PrintWriter out = response.getWriter();
    String title = "Setting Cookies Example";
    String docType ="<!doctype html public \"-//w3c//dtd html 4.0 " + "transitional//en\">\n";

    out.println(docType + "<html>\n" +"<head> <title>" + title + "</title> </head>\n" +

        "<body bgcolor = \"#f0f0f0\">\n" +"<h1 align = \"center\">" + title + "</h1>\n" +
          "<ul>\n" + "  <li><b>user id</b>: "  + request.getParameter("userid") + "\n" +
            "  <li><b>password</b>: "+ request.getParameter("password") + "\n" +"</ul>\n"
+"<li><b>credit card</b>: "+ request.getParameter("creditcard") + "\n" +"</ul>\n" +"</body>
</html>"
    );
  }
}
```

ReadCookies.java

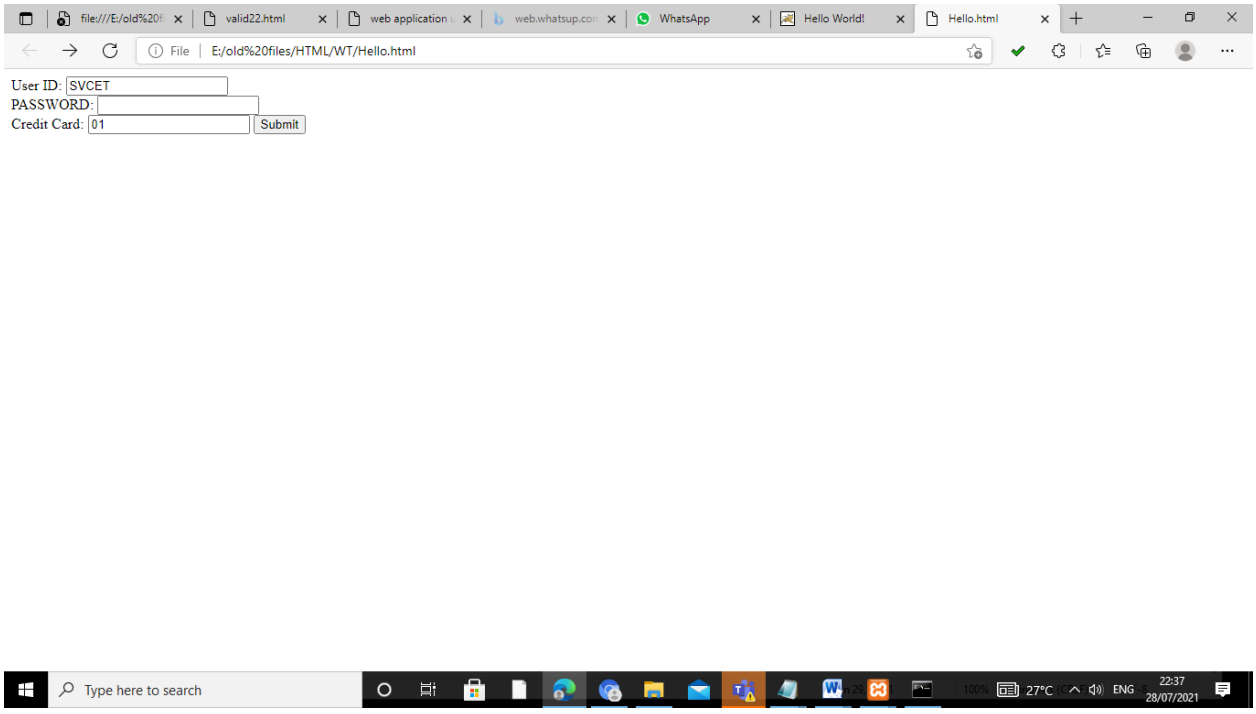
```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;

// Extend HttpServlet class
public class ReadCookies extends HttpServlet {
```

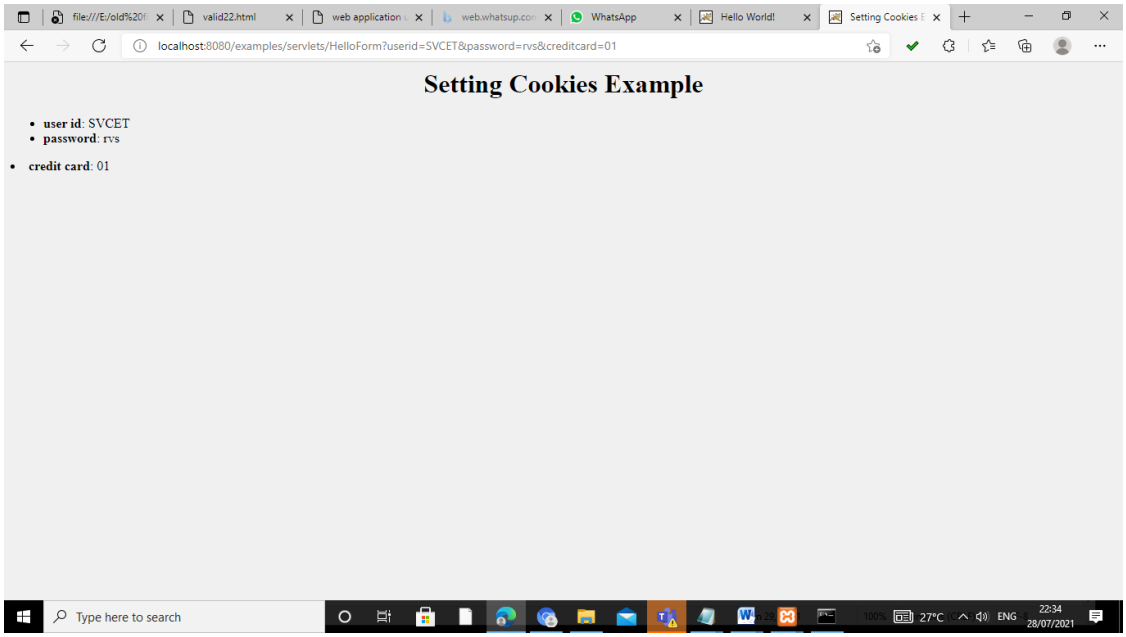
```
  public void doGet(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {

    Cookie cookie = null;
    Cookie[] cookies = null;

    // Get an array of Cookies associated with this domain
    cookies = request.getCookies();

    // Set response content type
    response.setContentType("text/html");

    PrintWriter out = response.getWriter();
    String title = "Reading Cookies Example";
    String docType =
      "<!doctype html public \"-//w3c//dtd html 4.0 " +
      "transitional//en\">\n";

    out.println(docType +
      "<html>\n" +
      "<head><title>" + title + "</title></head>\n" +
      "<body bgcolor = \"#f0f0f0\">\n" );

    if( cookies != null ) {
      out.println("<h2> Found Cookies Name and Value</h2>");

      for (int i = 0; i < cookies.length; i++) {
        cookie = cookies[i];
        out.print("Name : " + cookie.getName( ) + ",  ");
        out.print("Value: " + cookie.getValue( ) + " <br/>");
      }
    } else {
      out.println("<h2>No cookies founds</h2>");
    }
    out.println("</body>");
    out.println("</html>");
  }
}
```

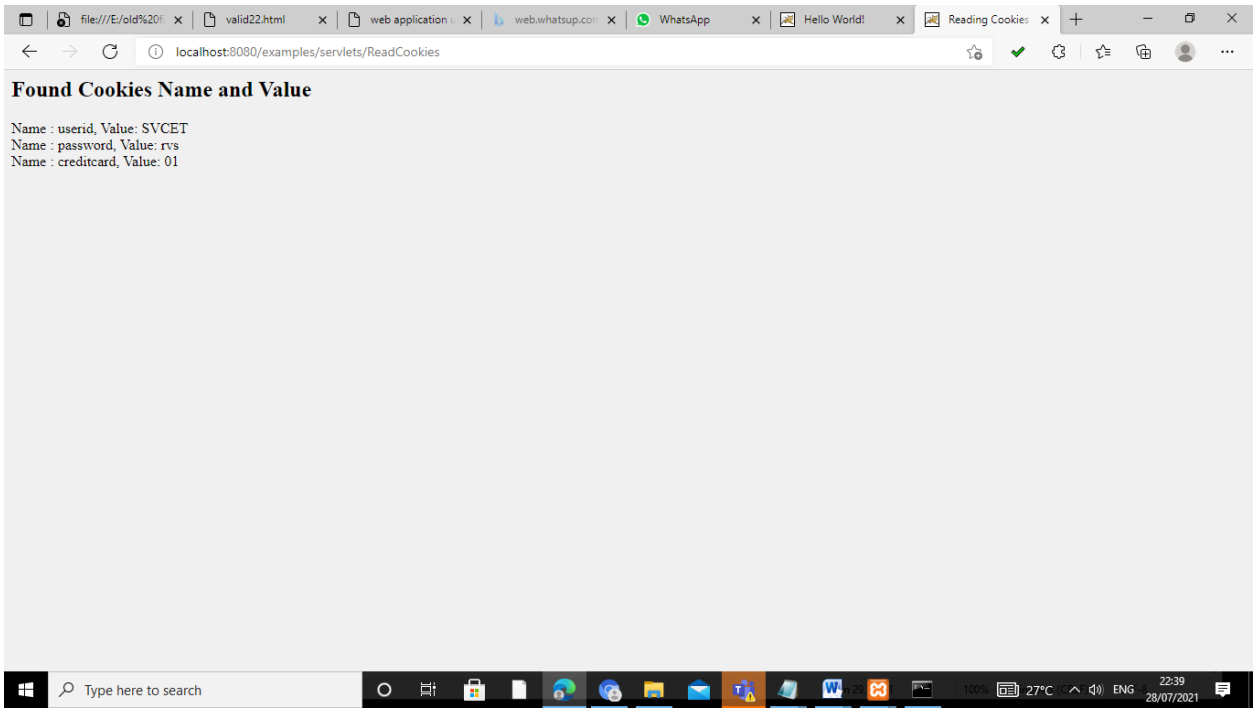
Edit web.xml by adding following lines.

```
<servlet>
      <servlet-name>HelloForm</servlet-name>
      <servlet-class>HelloForm</servlet-class>
   </servlet>
<servlet>
      <servlet-name>ReadCookies</servlet-name>
      <servlet-class>ReadCookies </servlet-class>
   </servlet>
<servlet-mapping>
      <servlet-name> ReadCookies </servlet-name>
```

```
        <url-pattern>/servlets/ ReadCookies </url-pattern>
    </servlet-mapping>
<servlet-mapping>
        <servlet-name>HelloForm</servlet-name>
        <url-pattern>/servlets/HelloForm</url-pattern>
    </servlet-mapping>
```







Result: - Thus, java, html and xml programs have been written to convert the static web pages into dynamic web pages using servlets and cookies and its output was verified.

WEEK 7

Aim:- Develop a web application using Java script to perform the following tasks:
a. Registration validation
b. User login
c. User profile and credit card payment.

Procedure:-
1. Open notepad to enter html, Java and JavaScript files
2. i) Type source code and save as <filename>.js for JavaScript.
   ii) Type source code and save as <filename>.html for HTML.
3. Run this HTML file from internet explorer (Google chrome/Mozilla/Internet Explorer).

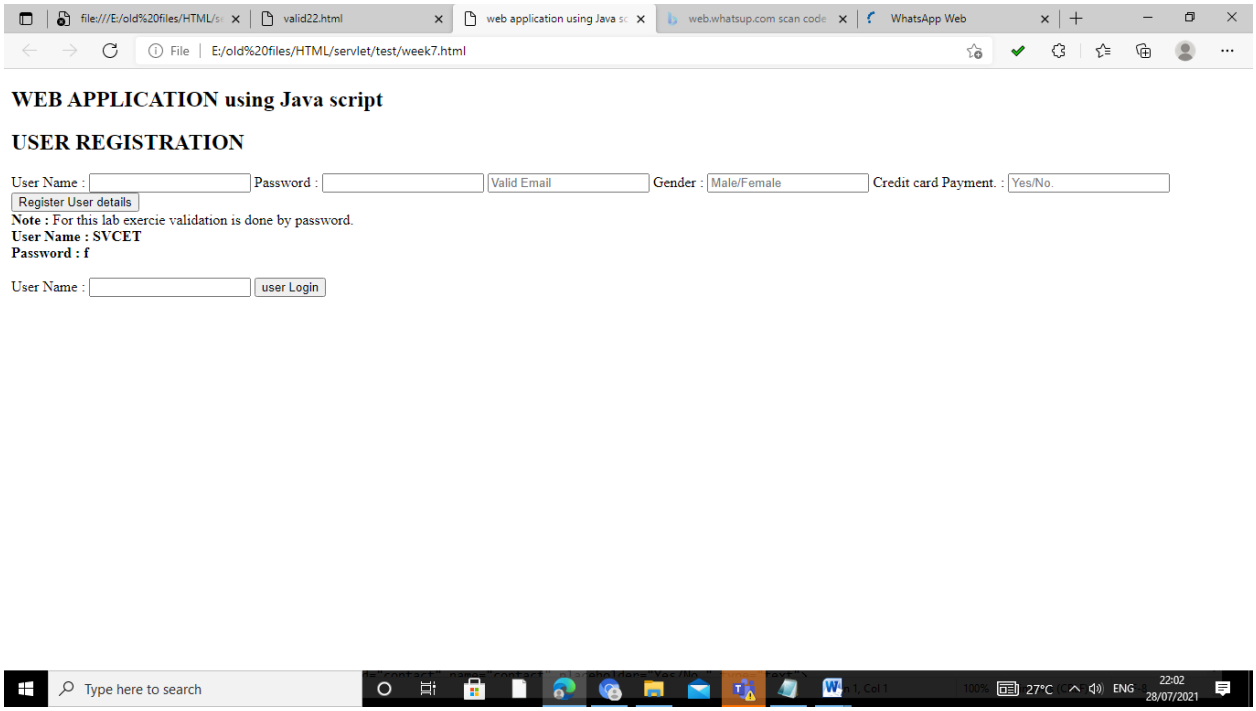
Week7.html

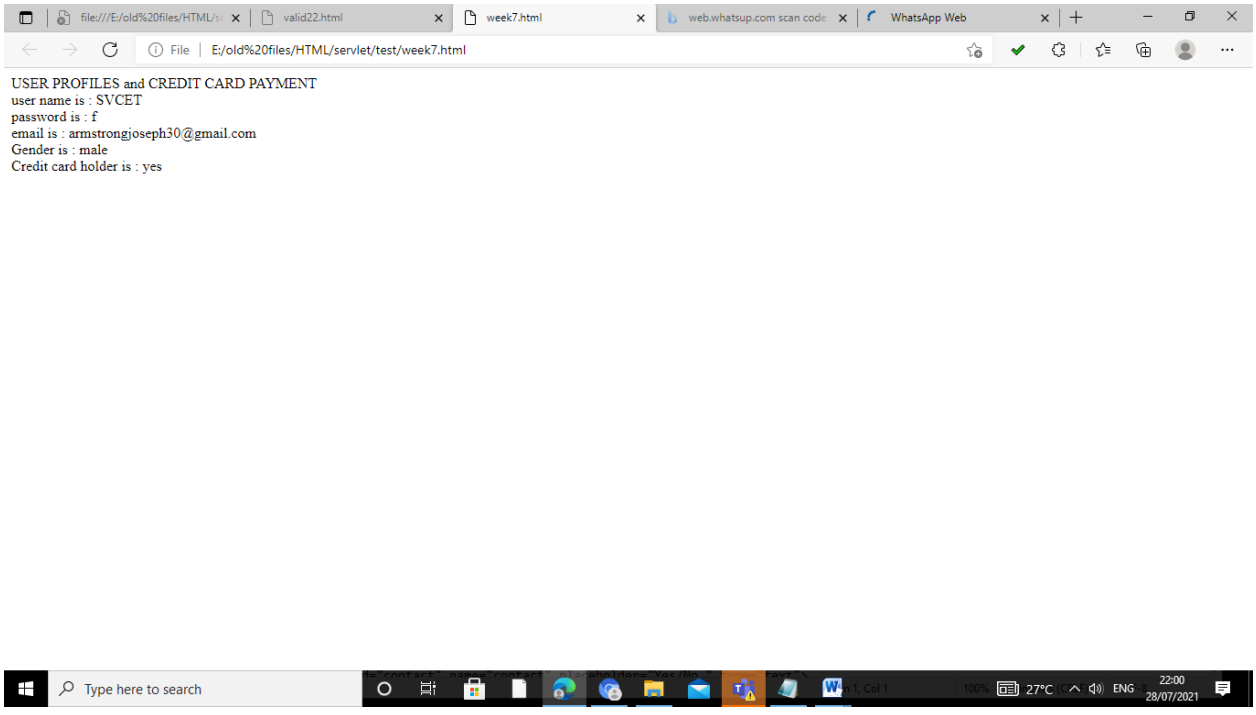
```
<!DOCTYPE html>
<html>
<head>
<title>web application using Java script </title>
<link href="css/style.css" rel="stylesheet"> <!-- Include CSS File Here-->
<script src="login2222.js"></script>
</head>
<body>
<div class="container">

<form id="form_id" method="post" name="myform">
<h2>WEB APPLICATION using Java script</h2>
<h2>USER REGISTRATION</h2>
<label>User Name :</label>
<input type="text" name="username" id="username"/>
<label>Password :</label>
<input type="password" name="password" id="password"/>
<input id="email" name="email" placeholder="Valid Email" type="text">
<label>Gender :</label>
<input id="gender" name="gender" placeholder="Male/Female" type="text">
<label>Credit card Payment. :</label>
<input id="contact" name="contact" placeholder="Yes/No." type="text">
<input type="button" value="Register User details" id="submit" onclick="validate()"/>
</form>
<span><b class="note">Note : </b>For this lab exercise validation is done by password. <br/><b
class="valid">User Name : SVCET <br/>Password : f</b></span>
</div>
<div class="main"> <br/>
<label>User Name :</label>
<input type="text" name="username" id="username1"/>

<input type="button" value="user Login" id="submit1" onclick="validate()"/>

</div>
</div>
</body>
```

```
</html>
```

login2222.js

```
function validate(){
var username = document.getElementById("username").value;
var password = document.getElementById("password").value;
var email = document.getElementById("email").value;
 var gender = document.getElementById("gender").value;

var contact = document.getElementById("contact").value;
if ( username == "SVCET" && password == "f"){
alert ("User register is validated successfully");
function people(username, password, email, gender, contact) {
        this.username = username;
this.password = password;
this.email = email;
this.gender = gender;
this.contact = contact;

}}
//if( username == document.getElementById("username1").value){
if( username == document.getElementById("username1").value && password == "f"){
var myuser = new people(username,password,email, gender, contact);
document.write("USER PROFILES and CREDIT CARD PAYMENT" + "<br>");
document.write("user name is : "+ myuser.username  + "<br>"+"password is : "+
myuser.password  + "<br>");
document.write("email is : "+ myuser.email  + "<br>"+"Gender is : "+ myuser.gender  + "<br>");
document.write("Credit card holder is : "+ myuser.contact  + "<br>");
}

}
```





Result: - Thus, Java script and html programs have been written to perform the tasks (Registration validation, User login and User profile and credit card payment) and its output was verified.

WEEK 8

Aim:- Develop and demonstrate a XHTML file that includes JavaScript script for the following problems:

a) Input: A number n obtained using prompt
   Output: The first n Fibonacci numbers

b) Input: A number n obtained using prompt
   Output: A table of numbers from 1 to n and their squares using alert.

Procedure:-

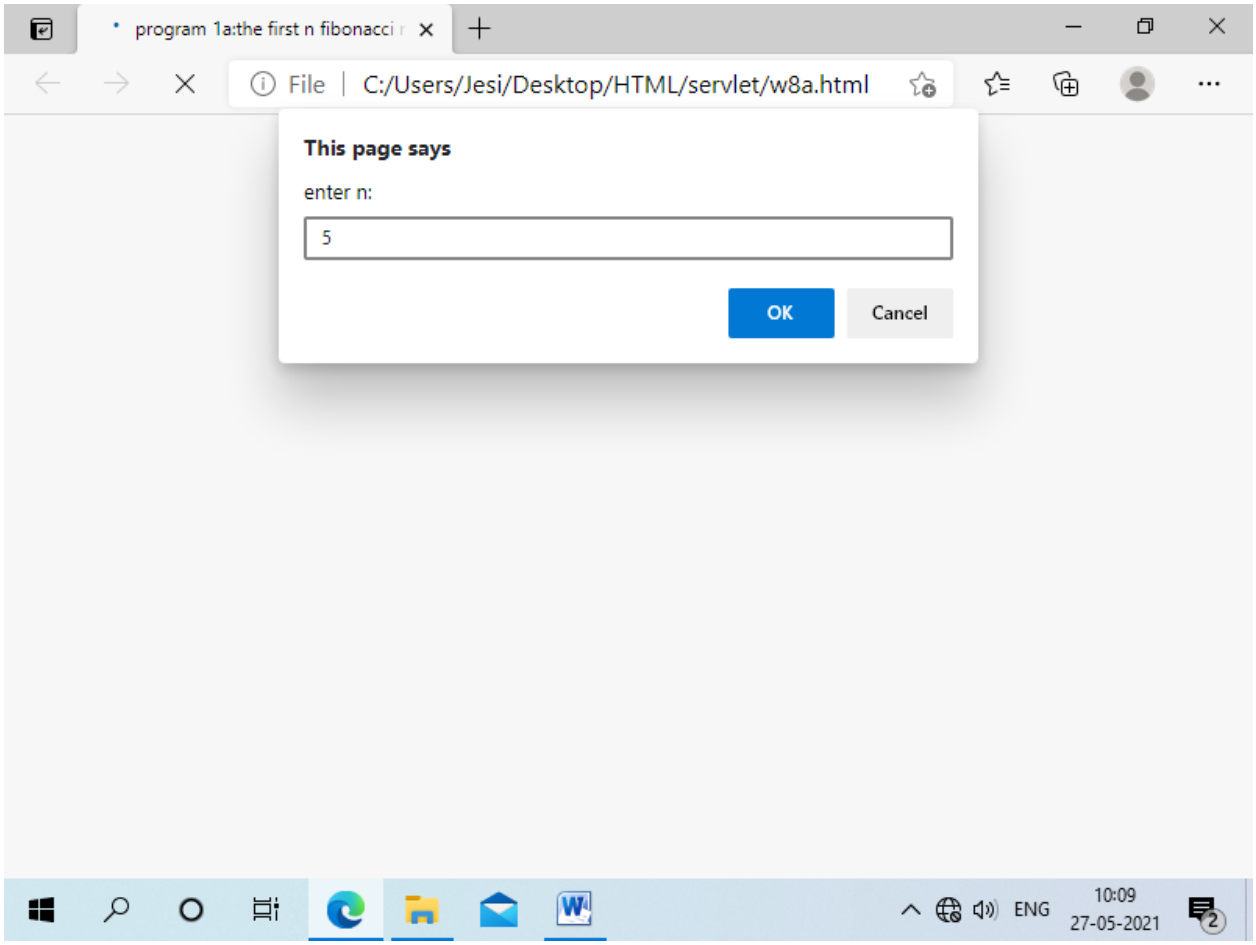
1. Open notepad to enter html, Java and JavaScript files
2. i) Type source code and save as <filename>.js for JavaScript.
   ii) Type source code and save as <filename>.html for XHTML.
3. Run this HTML file from internet explorer (Google chrome/Mozilla/Internet Explorer).

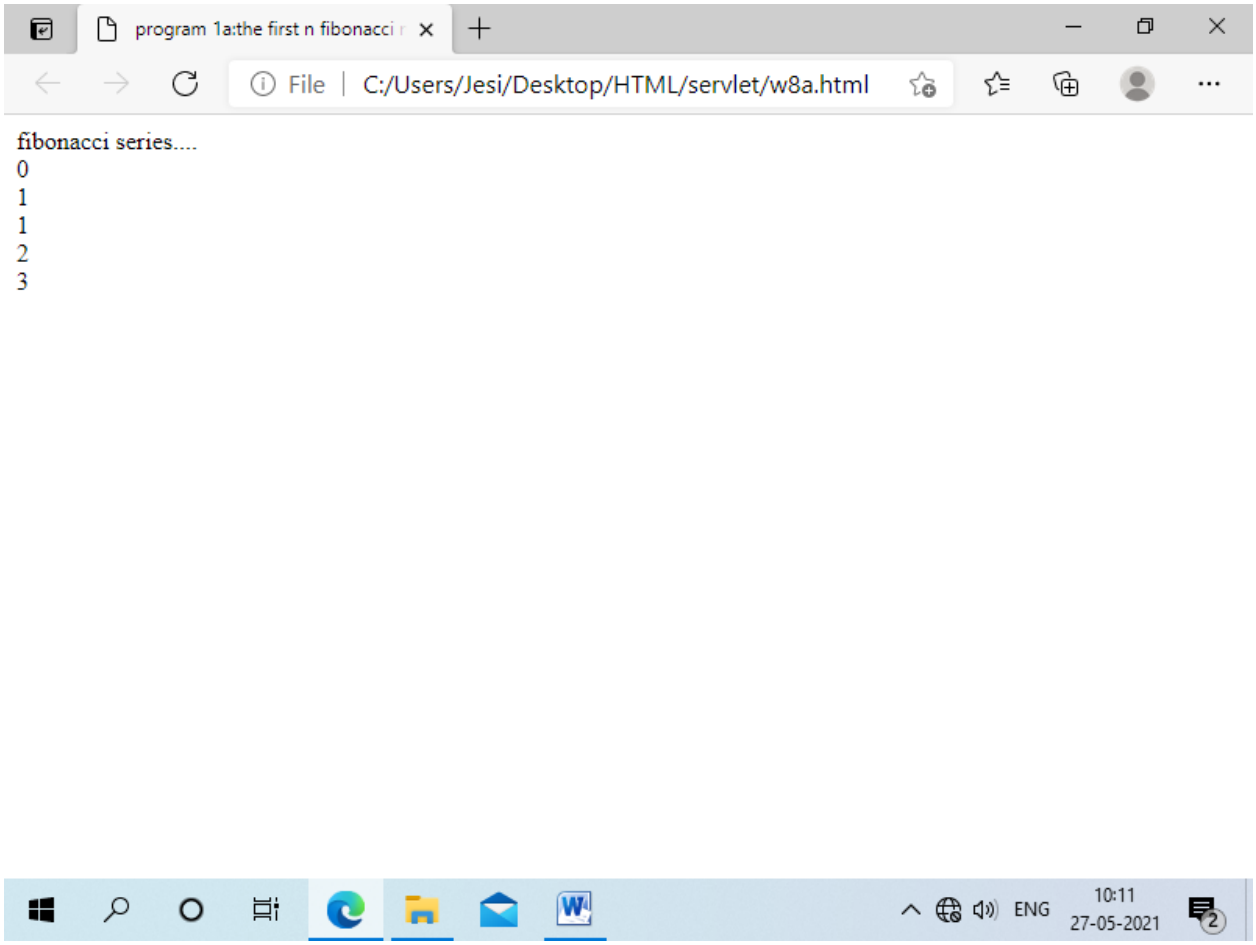
a) Input : A number n obtained using prompt

Output : The first n Fibonacci numbers

```
<html>
<head> <title> program 1a:the first n fibonacci number </title>
</head> <body>
<script type="text/javascript">
        var a=0;
        var b=1;
        var c,i;
        var n=prompt("enter n:"," ");
        while(n<=0)
        {
                alert("enter positive value");
                n=prompt("enter n:"," ");
        }
        document.write("fibonacci series....<br />");
        document.write(a,"<br />");
        document.write(b,"<br />");
        for(i=0;i<n-2;i++)
        {
                c=a+b;
                document.write(c,"<br />");
                a=b;
                b=c;
        }
</script >
</body>
</html>
```

Output


program 1a:the first n fibonacci
File | C:/Users/Jesi/Desktop/HTML/servlet/w8a.html
This page says
enter n:
5
OK
Cancel
ENG
10:09
27-05-2021

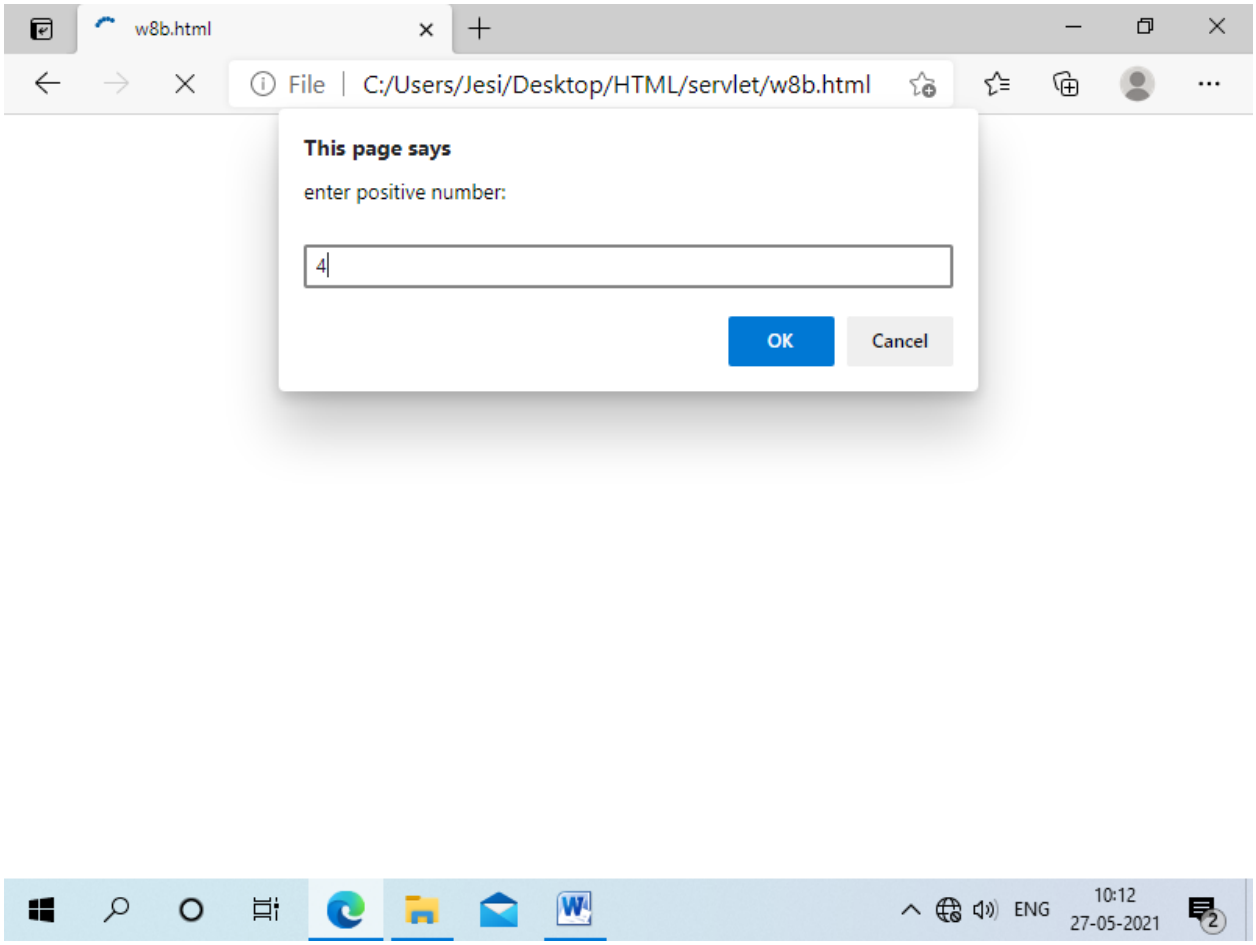


b) Input : A number n obtained using prompt

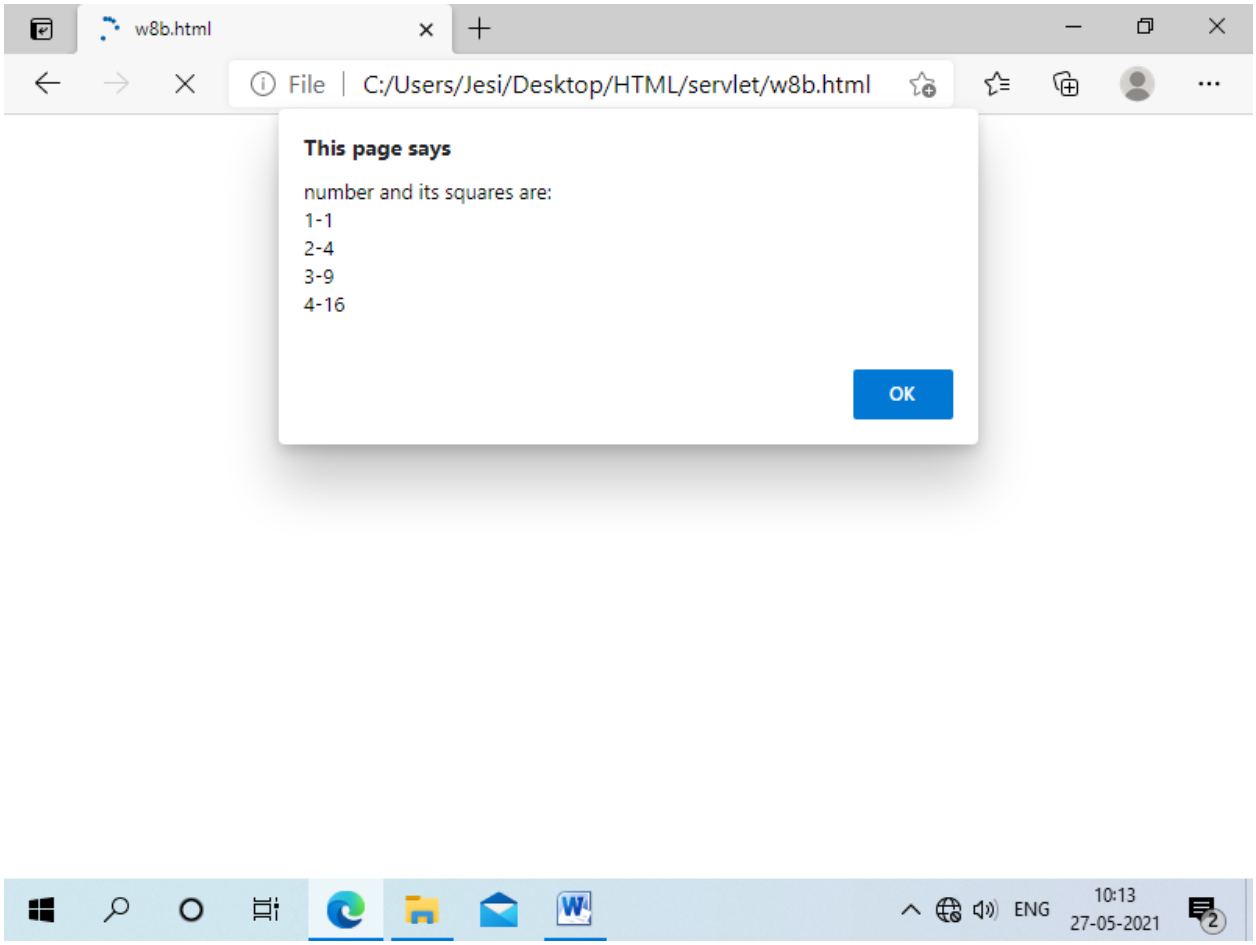
Output : A table of numbers from 1 to n and their squares using alert

```
<html>
<body>
<script type="text/javascript">
        var num = prompt("enter positive number:\n"," ");
        msgstr="number and its squares are:\n";
        for(i=1;i<=num;i++)
        {
                msgstr=msgstr+i+"-"+i*i+"\n";
        }
        alert(msgstr);
</script>
</body>
</html>
```

Output


w8b.html
File | C:/Users/Jesi/Desktop/HTML/servlet/w8b.html
This page says
enter positive number:
4
OK
Cancel

ENG
10:12
27-05-2021



Result: - Thus, XHTML includes JavaScript have been written for generating Fibonacci series and square of a number n obtained using prompt and its output was verified.

WEEK 9

Aim:- Write a PHP program to store current date-time in a COOKIE and display the 'Last visited on' date-time on the web page upon reopening of the same page.

Procedure:-

1. Open notepad to enter PHP file.
2. Type source code and save as <filename>.php for PHP.
3. Use Xampp Package to run PHP file on PHP Server.
4. Store this PHP file under the directory of C:\xampp\phpMyAdmin
5. Open the browser and Run PHP program.

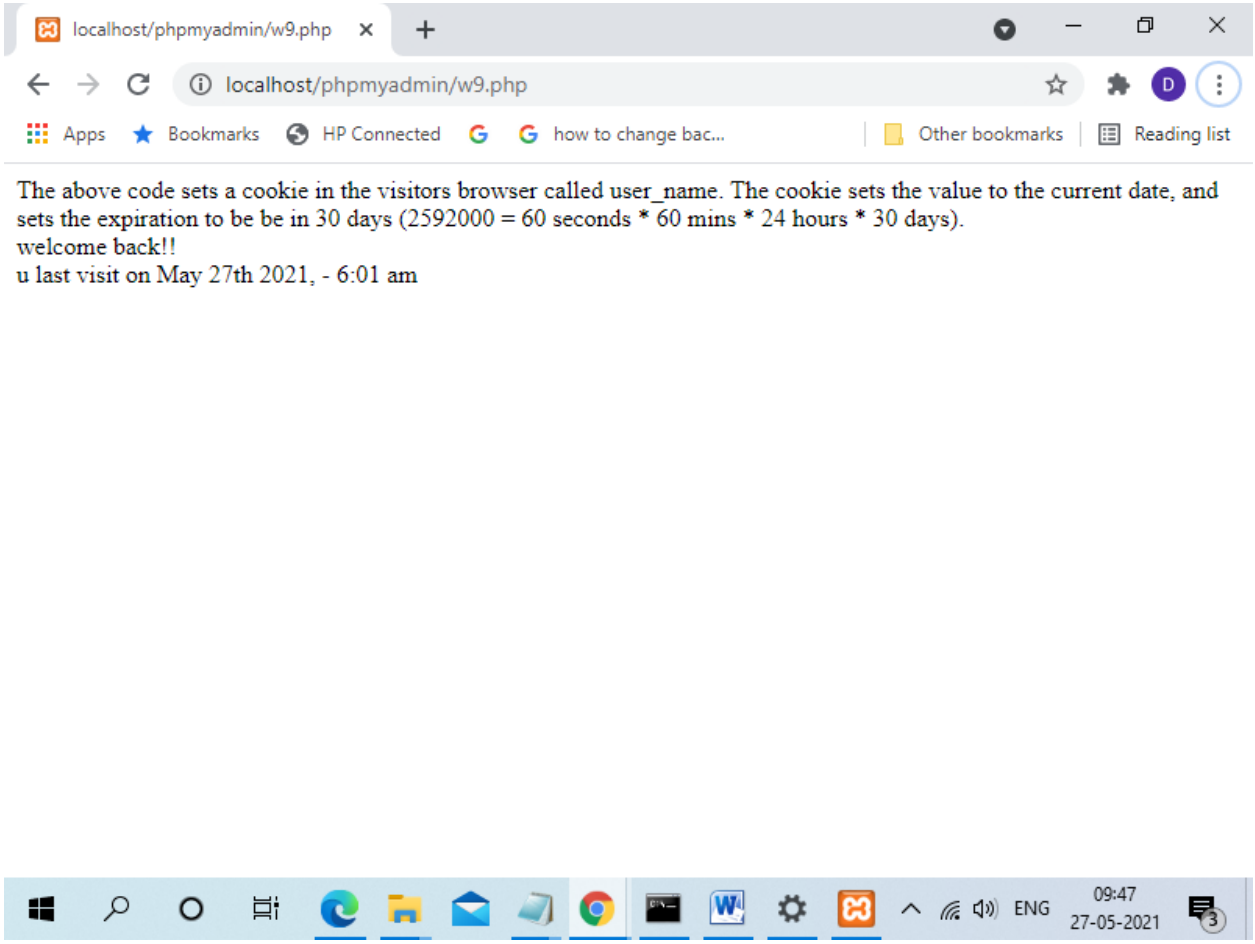
Url will be like this http://localhost:8080/phpMyAdmin/w9.php

.

W9.php

```
<?php
$month=2592000+time();
setcookie("user_name",date("F jS Y, - g:i a"),$month);
echo 'The above code sets a cookie in the visitors browser called user_name. The cookie sets the value to the current date, and sets the expiration to be be in 30 days (2592000 = 60 seconds * 60 mins * 24 hours * 30 days).<br>';
?>
<html>
<body>
<?php
if(isset($_COOKIE['user_name']))
{

$last=$_COOKIE['user_name'];
echo"welcome back!!<br>u last visit on ".$last;
}
else
{
echo "welcome to our site!";
}
?>
</body>
</html>
```

Output



Result: - Thus, PHP program has been written to store current date-time in a COOKIE and display the 'Last visited on' date-time on the web page upon reopening of the same page and its output was verified.

WEEK 10

Aim:- Write a PHP program to store page views count in SESSION, to increment the count on each refresh, and to show the count on web page.

Procedure:-

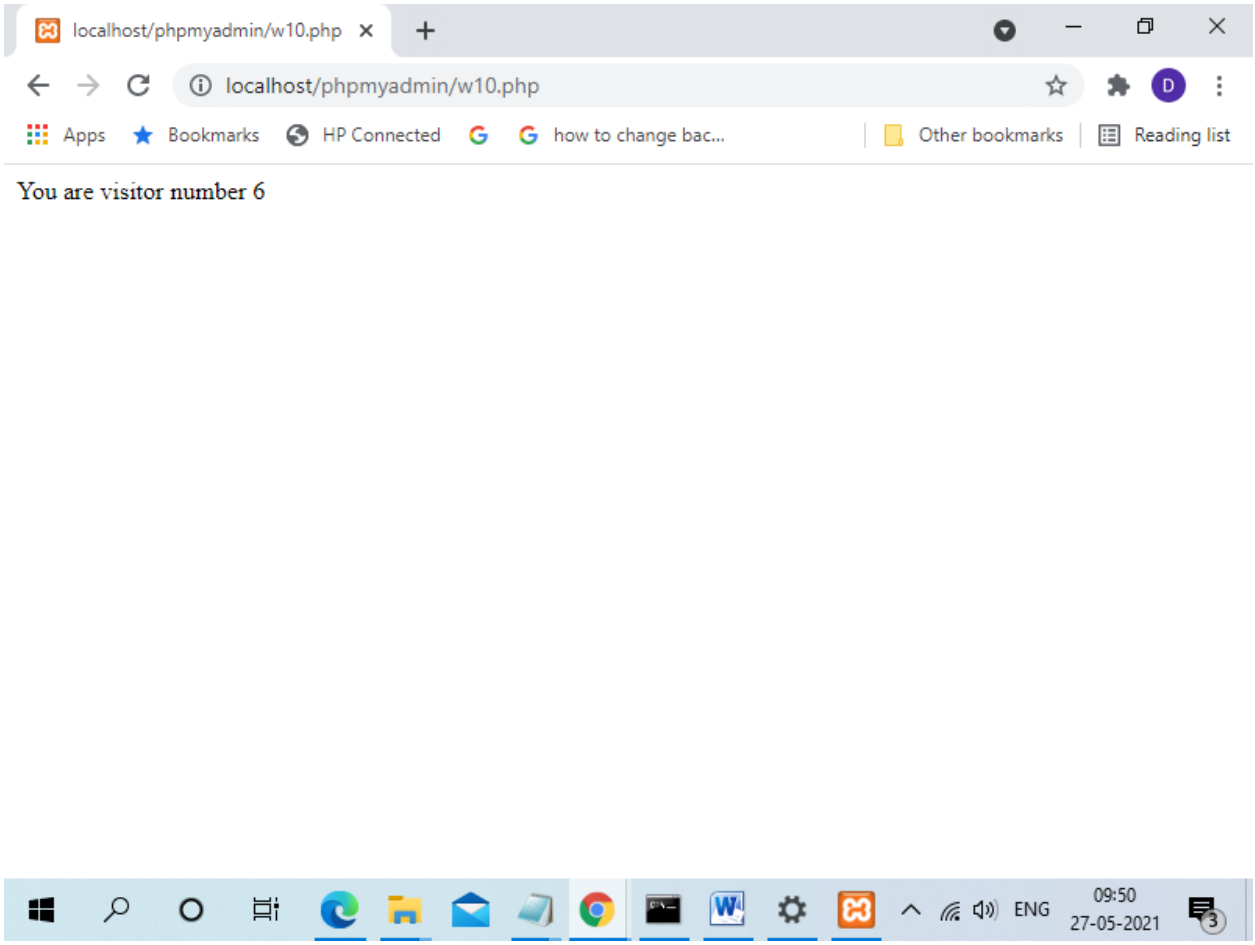
1. Open notepad to enter PHP file.
2. Type source code and save as <filename>.php for PHP.
3. Use Xampp Package to run PHP file on PHP Server.
4. Store this PHP file under the directory of C:\xampp\phpMyAdmin
5. Open the browser and Run PHP program.

Url will be like this http://localhost:8080/phpMyAdmin/w10.php

W10.php

```
<?php
session_start(); //start the PHP_session function
if(isset($_SESSION['page_count']))
{
    $_SESSION['page_count'] += 1;
}
else
{
    $_SESSION['page_count'] = 1;
}
 echo 'You are visitor number ' . $_SESSION['page_count'];
?>
```

Output



Result: - Thus, PHP program has been written to store page views count in SESSION, to increment the count on each refresh, and to show the count on web page and its output was verified.

WEEK 11

Aim:- Write a PHP program to connect database which contain the details of items (books in our case like Book name , Price, Quantity, Amount) of each category and extract data from the tables.

Procedure:-

1. Open notepad to enter PHP file.
2. Type source code and save as <filename>.php for PHP.
3. Use Xampp Package to run PHP files on PHP Server and create a table on MySQL
4. Create a table which contains the details of items (books in our case like Book name , Price, Quantity, Amount) of each category on MySQL
5. Store this PHP files under the directory of C:\xampp\phpMyAdmin
6. Open the browser and Run PHP program.

Url will be like this http://localhost:8080/phpMyAdmin/w11.php

W11.php

```
<?php
$y=new mysqli("localhost","root","","mysql");

$x="select * from cart";
$res=mysqli_query($y, $x);
$var="AddtoCart";
echo "<form method=post action=cart.php>";
echo
"<table>"."<tr>"."<th>"."Bookname"."</th>"."<th>"."Price"."</th>"."<th>"."Quantity"."</th>"."
<th>"."."</th>"."</tr>";
$num=1;
while($val=mysqli_fetch_array($res, MYSQLI_ASSOC))
{
$str= "btn"+ $num;
$str2=$val['bookname'];
echo "<tr>"."<td>".$val['bookname']."</td>"."<td>".$val['price']."</td>"."<td>"."<input
type=text
name=$str2>"."</input>"."</td>"."</tr>";
$num++;
}
echo "<tr>"."<td>"."<input type=submit name=btn1 value=submit>"."</input>"; echo
"</form>";
?>
```

cart.php

```
<html>
<body>

<?php
$bn1=100;
$bn2=100;
$bn3=100;
```

```
$bn4=100;
$am1=$bn1*50;
$am2=$bn1*50;
$am3=$bn1*40;
$am4=$bn1*70;
$y=new mysqli("localhost","root","","mysql");

$x="INSERT INTO cart(bookname,price,quantity,amount) VALUES('AI',50,$bn1,$am1)";
$res=mysqli_query($y, $x);
$x="INSERT INTO cart(bookname,price,quantity,amount) VALUES('HTML',50,$bn2,$am2)";
$res=mysqli_query($y, $x);
$x="INSERT INTO cart(bookname,price,quantity,amount) VALUES('XML',40,$bn3,$am3)";
$res=mysqli_query($y, $x);
$x="INSERT INTO cart(bookname,price,quantity,amount) VALUES('JAVA',70,$bn4,$am4)";
$res=mysqli_query($y, $x);
$query="SELECT * FROM cart";
$result=mysqli_query($y, $query);
echo
"<table>"."<tr>"."<th>"."BookName"."</th>"."<th>"."Price"."</th>"."<th>"."Quantity"."</th>".
"<th>"."Amount"."</th>"."</tr>";
while($value=mysqli_fetch_array($result, MYSQLI_BOTH))
{
echo
"<tr>"."<td>".$value['bookname']."</td>"."<td>".$value['price']."</td>"."<td>".$value['quantity']
."</td>
"."<td>".$value['amount']."</td>"."</tr>";
}
?>
</body>
</html>
```

Output

Result: - Thus, PHP program has been written to connect database which contain the details of items (books in our case like Book name, Price, Quantity, Amount) of each category and extract data from the tables and its output was verified.

WEEK 12

Aim:- Write a PHP program to accept book Information viz, Accession number, title, authors, edition and publisher from a web page and store the information in a database and to search for a book with the title specified by the user and to display the search results with proper headings.

Procedure:-

1. Open notepad to enter PHP file.
2. (i) Type source code and save as <filename>.php for PHP.
   (ii) Ttype source code and save as <filename>.html for html.
3. Use Xampp Package to run PHP files on PHP Server and create a table on MySQL
4. Create a table which contains the details of items (Accession number, title, authors, edition and publisher) of each category on MySQL.
5. Store this PHP file under the directory of C:\xampp\phpMyAdmin
6. Open the browser and Run W12.html program.

W12.html

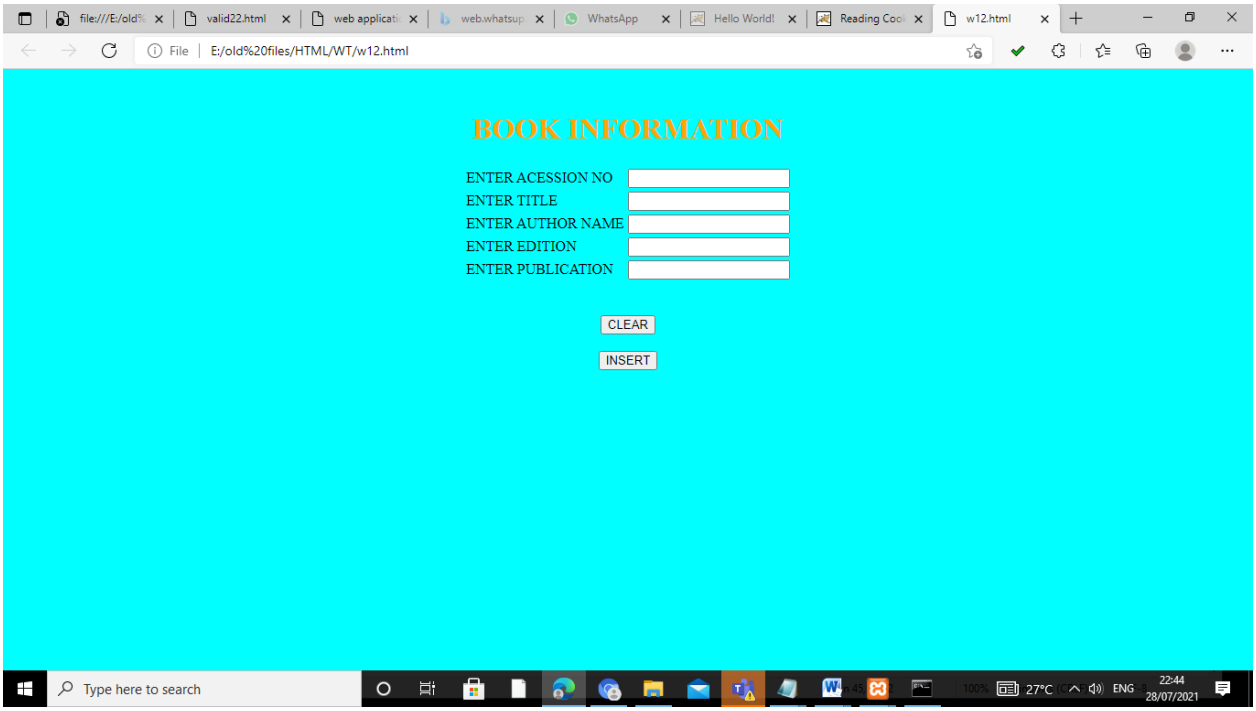
```
<html>
<body bgcolor=cyan>
<form action="w122.php" ><br><font color=orange><h1><center>BOOK
INFORMATION</H1>
<table align=center><tr><td>ENTER ACESSION NO</td><td><INPUT
NAME=acn></td></tr>
<tr><td>ENTER TITLE</td><td><INPUT NAME=tit></td></tr>
<tr><td>ENTER AUTHOR NAME</td><td><INPUT NAME=aut></td></tr>
<tr><td>ENTER EDITION</td><td><INPUT NAME=edi></td></tr>
<tr><td>ENTER PUBLICATION</td><td><INPUT NAME=pub></td></tr>
</TABLE><br><br>
<center><input type=reset value=CLEAR><BR><BR>
<center><input type=submit value=INSERT>
</form>
</body>
</html>
```

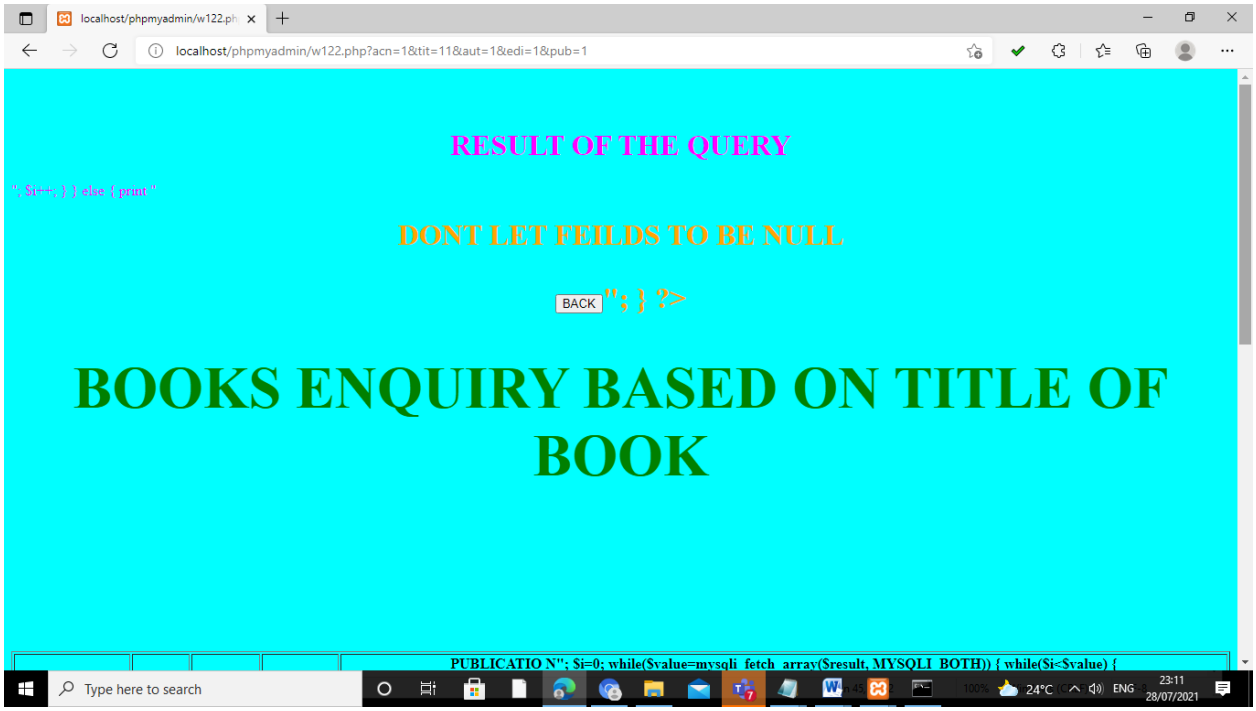
W122.php

```
<?
$con= new mysqli("localhost", "root", "","mysql") or die('could not connect to server');
$acn=$_POST["acn"];
$tit=$_POST['tit'];
$aut=$_POST['aut'];
$edi=$_POST['edi'];
$pub=$_POST['pub'];

if($acn && $tit && $aut && $edi && $pub ){
$y=new mysqli("localhost","root","","test");

$x=" insert into book values('$acn','$tit','$aut','$edi','$pub') ");
$res=mysqli_query($y, $x);
$query="SELECT * FROM book";
```

```
$result=mysqli_query($y, $query);
echo"<body bgcolor=cyan><br><br><h1><center><font color=magenta>
RESULT OF THE QUERY</H1><table border=1 align=center>
<tr><th>ACSESSION_NO</TH><TH>TITTLE</TH><TH>AUTHOR</TH><TH>EDITION</
TH><TH>PUBLICATIO
N</TH</TR>";
$i=0;
while($value=mysqli_fetch_array($result, MYSQLI_BOTH))
{
while($i<$value) {
$ascn_no=mysqli_result($result,$i,"ascn_no");
$author=mysqli_result($result,$i,"author");
$edition=mysqli_result($result,$i,"edition");
$publication=mysqli_result($result,$i,"publication");
echo "<tr><td>$ascn_no</td><td>$author</td><td>$edition</td><td>$publication</td></tr>";
$i++;
}
}
else
{
print "<body bgcolor=cyan><h1 align=center><font color=orange>DONT LET FEILDS TO BE
NULL<BR><form
action =http://localhost/phpmyadmin/w12.html><input type=submit value=BACK>";
}
?>
<html><body bgcolor=cyan>
<form action="http://localhost/phpmyadmin/w122.php">
<H1><center><font color=green>BOOKS ENQUIRY BASED ON TITLE OF
BOOK</center></H1><br>
<BR><BR><TABLE ALIGN=CENTER><TR><TD><font color=red ><blink><b>ENTER
BOOK
TITLE</TD><TD><INPUT NAME=tit></td></tr></table>
<br><br><br><br><CENTER>
<input type=submit value=GET_ME_BOOKS>
</FORM></BODY></HTML>
<?
mysqli_connect("localhost") or die("connection failed!!");
$tit=$_POST['tit'];
if($tit != ""){
$res=mysqli_db_query("test","select ascn_no,author,edition,publication from book where
title='$tit'") or die("Query failed!!");}
if(mysqli_num_rows($res))
{
echo"<body bgcolor=cyan><h1><font color=orange><CENTER>AVAILABLE BOOKS FOR
GIVEN
TITLE<br><font color=red>$tit<br><table border=1
align=center><tr><th>ACSESSION_NO</TH><TH>AUTHOR</TH><TH>EDITION</TH><T
H>PUBLICATION</T
H</TR>";
$num=mysqli_fetch_row($res)
$i=0;
while($i<$num) {
```

```
$ascn_no=mysqli_result($result,$i,"ascn_no");
$author=mysqli_result($result,$i,"author");
$edition=mysqli_result($result,$i,"edition");
$publication=mysqli_result($result,$i,"publication");
echo "<tr><td>$ascn_no</td><td>$author</td><td>$edition</td><td>$publication</td></tr>";
$i++;
}

else
{print"<body bgcolor=cyan><br><br><br><center><H2><FONT color=red
SIZE=8>SORRY</FONT><br><center>NO BOOKS ARE AVALIBLE FOR YOUR
TITLE</H2><form
action=http://localhost/phpmyadmin/w12.html><br><br><input type=submit
value=GOBACK>";
}
?>
```





Result: - Thus, PHP and HTML programs have been written to accept book Information viz, Accession number, title, authors, edition and publisher from a web page and store the information in a database and to search for a book with the title specified by the user and to display the search results with proper headings and its output was verified.