

DEFINITION

EXPERIMENT 1

Aim To implement image map using html.

Theory HTML stands for Hyper Text Markup Language. It describes the structure of web. It tells browser how to display the content. Browsers send HTML document to determine how to display the document.

Image Maps: with image maps, we can add clickable areas on a image. `<map>` tag is used for this purpose.

```
CODE <!-- Index.html-->
<!DOCTYPE HTML>
<html lang="en">
<head>
    <title> India </title>
    <style>
        .center {
            display: block;
            margin-left: auto;
            margin-right: auto;
        }
        h1 {
            text-transform: uppercase;
        }
        img {
            margin-top: 1.8rem;
        }
    </style>
</head>
<body>
    <h1> India </h1>
    
</body>
</html>
```

```

</style>
</head>
<body>
<div class="container">
  <div class="row">
    <h1 class="center"> INDIA </h1>
  </div>
  <div class="row">
    
    <map name="IndiaMap">
      <area shape="rect" coords="40, 160, 160, 280"
            href="rajasthan.html" alt="Rajasthan">
      <area shape="rect" coords="100, 360, 160, 480"
            href="karnataka.html" alt="Karnataka">
      <area shape="rect" coords="170, 160, 260, 250"
            href="up.html" alt="Uttar Pradesh">
    </map>
  </div>
</div>
</body>
</html>

```

rajasthan.html

```

<html><head>
  <title> Rajasthan </title> </head>
  <body> <h1> Rajasthan </h1>
    <p> Area = 342,239 km</p>

```

</body> </html>

Karnatka.html

```
<html><head>
<title> Karnataka</title></head>
<body><h1> Karnataka</h1>
<p> 191,791 km</p>
</body></html>
```

Up.html

```
<html><head>
<title> Uttar Pradesh</title></head>
<body><h1> Uttar Pradesh</h1>
<p> Area 243,286 km</p>
</body></html>
```

Result

Successfully created an image map in HTML.

[Index.html](#)

INDIA MAP



[Up.html](#)

Uttar Pradesh

The most populated state of India

Kerala

h

EXPERIMENT 2

Aim To create a webpage with internal css

Code

```
<html>
  <head>
    <title> inline css </title>
  </head>
  <body>
    <h1 style = "color: royalblue; text-shadow: 2px 2px 8px rgba(0,0,0,1);>
      This page was made to demonstrate inline css.
    </h1>
    <div>
      <img style = "margin: auto; display: block; height: 200px;
        border-radius: 25px; border: dashed black 2px;">
        src = "html5.jpg" />
    </div>
  </body>
</html>
```

Theory An entire style may be used to apply a unique style for a single element. It is a type of style sheet declaration that only changes the properties of the node it is applied on.

Result: Created a webpage with internal inline css.

This page is was made to show inline css



↓
Clever

A handwritten blue arrow pointing downwards from the bottom right towards the center of the page, with the word "Clever" written next to it.

↓
B

A handwritten blue arrow pointing downwards from the bottom left towards the center of the page, with the letter "B" written next to it.

EXPERIMENT 3

Aim To create a webpage using external css

Theory External styles are defined within the `<link>` element, inside the `<head>` section of an HTML page. This gives a global control over each element in a clean format. Each external style sheet file is saved in a file with an extension `.css`.

CODE

```
<html>
  <head>
    <title> external css </title>
    <link rel="stylesheet" type = "text/css" href="style.css" >
  </head>
  <body>
    <h1> The page was made to show external css. </h1>
    <div>
      <img src = "css3.jpg" >
    </div>
  </body>
</html>
```

Style.css

h1 {

color: royalblue;

text-shadow: 2px 2px 8px rgba(0, 0, 0, 0.4);

}

img {

margin: auto;

display: block;

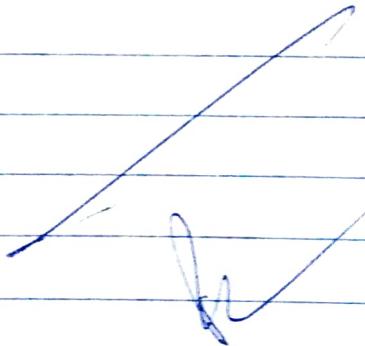
height: 200px;

border-radius: 25px;

border: dashed black 2px

}

Result Created a webpage using external css successfully.



This page is was made to show external css



Kunal

EXPERIMENT 4

Aim To make a form in HTML and verify constraints using javascript.

CODE

Index.html

```

<html>
  <head>
    <title> Form Validation </title>
    <link rel="stylesheet" type="text/css" href="style.css">
  </head>
  <body>
    <script src="script.js"></script>
    <h2 style="text-align:center"> ILLUMINATI REGISTRATION FORM </h2>
    <div class="form">
      <form name="RegForm" action="/submit" onsubmit="return func()" method="post">
        <p> Name: <input type="text" size=45 name="Name" class="field">
        </p> <br>
        <p> Email Address: <input type="text" size=45 name="Email" class="field"> <br>
        <p> Password: <input type="password" size=45 name="Password" class="field"> <br>
        <p> Select Conspiracy
          <select type="text" value="" name="Subject" class="field">

```

```
<option> Choose one </option>
<option> Flat Earth </option>
<option> Lizard People </option>
<option> Area 51 </option>
<option> Nikola Tesla </option>
</select> </p> <br> <br>
<p>
    <input type="submit" style="float: left"
        value="Send" name="Submit" class="button positive">
    <input type="reset" value="Reset" name="Reset"
        class="button negative">
</p>
</form>
</div>
</body>
</html>
```

style.css

```
+ { padding: 10px; }
form { margin: 0 auto;
       width: 600px; }
}
.field {
    float: right;
    border-radius: 25px;
    border: 1px solid;
```

.field: focus {

border: green 2px dashed;

box-shadow: 2px 2px 50px rgba(0,0,0,0.6);

}

.button {

padding: 10px 20px;

border-radius: 30px;

margin: 5px;

border: none;

}

.positive {

background-color: green;

color: white;

3

.positive: active {

box-shadow: 2px 2px 20px green;

3

.negative {

background-color: red;

color: white

3

.negative: active {

box-shadow: 2px 2px 20px red;

3

script.js

function func() {

```
var name = document.forms["RegForm"]["Name"];  
var email = document.forms["RegForm"]["Email"];  
var what = document.forms["RegForm"]["Subject"];  
var password = document.forms["RegForm"]["Password"];
```

if (!name.value.match(/^[a-zA-Z-]{3,16}\$/)) ||

name.value == "") {

window.alert("Enter a valid username");

name.focus();

return false;

}

if (email.value == "") {

window.alert("Please enter a valid email address.");

email.focus();

return false;

}

if (password.value == "") {

window.alert("Please enter your password"),

email.focus();

return false;

}

if (what.selectedIndex < 1) {

window.alert("Please enter your course."),

what.focus();

return false;

3 return true;

3

Result:

Successfully created a form on a webpage and
validated the fields using javascript.



ILLUMINATI REGISTRATION FORM

Name:

E-mail Address:

Password:

Select Conspiracy

Choose one

A handwritten signature in blue ink, appearing to read "Reverend", is written over a thick, light blue curved line that starts from the left side of the page and sweeps across towards the right. The signature is somewhat slanted and expressive.

Experiment - 5

Aim : To Write a Program in JAVASCRIPT:

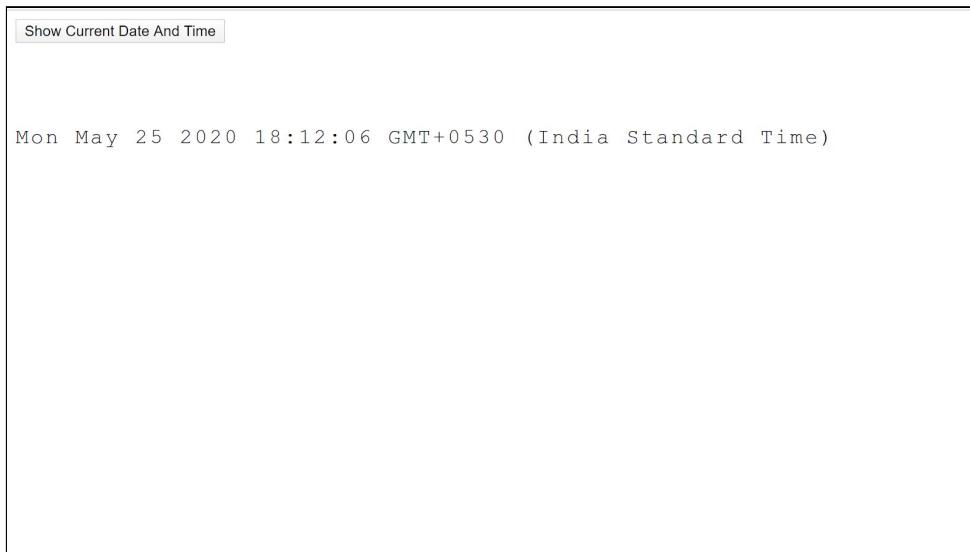
1. Current Date & Time
2. To show Online Exam

Code :

```
1.  
<!DOCTYPE html>  
<html lang="en">  
<head>  
    <meta charset="UTF-8">  
    <meta name="viewport" content="width=device-width, initial-scale=1.0">  
    <title>Date and Time - Kunal</title>  
    <script>  
        function show()  
        {  
            var d = new Date();  
            document.getElementById("demo").innerHTML = d;  
        }  
    </script>  
  
    <style type = "text/css" media = "all">  
  
        #demo{  
            font-size: larger;  
            letter-spacing: 2px;  
            font-family: 'Courier New', Courier, monospace;  
        }  
    </style>  
  
</head>  
<body>
```

```
<button onclick="show()">Show Current Date And  
Time</button><br><br><br><br>  
<p id="demo"></p>  
  
</body>  
</html>
```

OUTPUT -



2.

```
<!DOCTYPE html>  
<html lang="en">  
<head>  
  <meta charset="UTF-8">  
  <meta name="viewport" content="width=device-width, initial-scale=1.0">  
  <title>Exam Form - Kunal</title>  
  <script language="javascript">  
    function exam(form)  
    {  
      var i=0;  
      if(form.one[2].checked)  
        i=i+1;
```

```
if(form.three[0].checked)
i=i+1;
if(form.four[0].checked)
i=i+1;
if(form.five[1].checked)
i=i+1;
window.alert("Thank You Taking Online Exam! Your Score is: "+i);
}
</script>

<style type = "text/css" media = "all">

body{
    font-family:'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
    background-color: rgba(255, 255, 128, .5);

}

.heading{
    text-align: center;
}

.submit{
    text-align: center;

}

.buttons{
    border-radius: 1rem;
    border-style: solid;
    color: lightseagreen;
    background-color: mintcream;
    font-size: 1.5rem;
}

.buttons:hover{
    color: rgb(178, 32, 171);
    background-color: rgb(255, 249, 245);
}
```



```

<input type="radio" name="four" value="applet">
<label>Applet</label>
<input type="radio" name="four" value="lang">
<label>Lang</label>
<input type="radio" name="four" value="swing">
<label>Swing</label>
</p>
<p>
<h1>4)Java does not support</h1>
<input type="radio" name="five" value="inheritance">
<label>Inheritance</label>
<input type="radio" name="five" value="multiple inheritance">
<label>Multiple inheritance</label>
<input type="radio" name="five" value="polymorphism">
<label>Polymorphism</label>
<input type="radio" name="five" value="encryption">
<label>Encryption</label>
</p>
<p class="submit">
<input class="buttons" type="submit" value="Submit">
<input class="buttons" type="reset" value="Reset">
</p>

</body>
</html>

```

Output:

The screenshot shows a Java application window with a yellow background. A modal dialog box is centered on the screen. The dialog has a title bar with 'WE' on the left and 'RM' on the right. Inside the dialog, there is a message area with the text: 'This page says' and 'Thank You Taking Online Exam! Your Score is: 4'. Below this message is an 'OK' button. The main application window in the background contains several questions and multiple-choice options. Question 1 asks 'Which is platform independent language?' with options C++, c, java, and BASIC. Question 2 asks 'Which is class of all class in java?' with options Object, Math, System, and Graphic. Question 3 asks 'Frame package is in which package?' with options AWT, Applet, Lang, and Swing. Question 4 asks 'Java does not support' with options Inheritance, Multiple inheritance, Polymorphism, and Encryption.

WE RM

This page says
Thank You Taking Online Exam! Your Score is: 4

OK

1) Which is platform independent language?

C++ c java BASIC

2) Which is class of all class in java?

Object Math System Graphic

3) Frame package is in which package?

AWT Applet Lang Swing

4) Java does not support

Inheritance Multiple inheritance Polymorphism Encryption

Submit Reset

Experiment - 6

Aim : To write a program to invoke Servlet from HTML form.

ALGORITHM :

- STEP 1: Create a HTML page including some form elements.
- STEP 2: Inside the tag, for the action attribute specify the full path name of the File.
- STEP 3: Create a .java file that imports javax.http.servlet.*;
- STEP 4: Set classpath where servlet-api.jar file resides.
- STEP 5: Compile the servlet program using javac programname.java
- STEP 6: Place the class file ...\\Tomcat5.5\\webapps\\Examples\\WEB-INF\\classes\\folder.
- STEP 7: Define the doPost function to process the data obtained from the HTML file.
- STEP 8: Modify the web.xml file using your servletClassName.
- STEP 9: Invoke the class file using http://localhost:8080/servletClassName from your browser

Post.java

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

public class post extends GenericServlet{

    public void service(ServletRequest request,ServletResponse response)
        throws ServletException,IOException{

        PrintWriter pw=response.getWriter();

        Enumeration e=request.getParameterNames();

        while(e.hasMoreElements())
```

```

    {

        String pname=(String)e.nextElement();

        pw.print(pname+"=");

        String pvalue=request.getParameter(pname);

        pw.println(pvalue);

    }

    pw.close();

}

}

```

Post.html

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Java Servlet - Divyansh</title>
    <script language="javascript">
        function exam(form)
        {
            var i=0;
            if(form.one[2].checked)
                i=i+1;
            if(form.three[0].checked)
                i=i+1;
            if(form.four[0].checked)
                i=i+1;
            if(form.five[1].checked)
                i=i+1;
            window.alert("Thank You Taking Online Exam! Your Score is: "+i);
        }
    </script>

<style type = "text/css" media = "all">

```

```
body{
    font-family:'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
    background-color: rgba(255, 255, 128, .5);
    text-align: center;

}

.centre{
    text-align: center;
    margin-left:auto;
    margin-right:auto;
}

.buttons{
    border-radius: 1rem;
    border-style: solid;
    color: lightseagreen;
    background-color: mintcream;
    font-size: 1.5rem;
}

.buttons:hover{
    color: rgb(178, 32, 171);
    background-color: rgb(255, 249, 245);
}

</style>

</head>
<body>

<form class="form" name="Post" method=POST
action="http://localhost:8080/examples/post">
    <table class="centre">
        <tr>

            <td><B>Employee</B></td>
```

```

<td><input type="textbox" name="ename" size="25" value=""></td>
</tr>

<tr>

<td><B>phone</B></td>

<td><input type="textbox" name="phoneno" size="25" value=""></td>
</tr>

</table>

<input class="buttons" type="submit" value="Submit">
</form>
</body>
</html>

```

XML CODE:

```

//Include the code in Web.xml document//

<servlet>

    <servlet-name>Post</servlet-name>
    <servlet-class>Post</servlet-class>

</servlet>

<servlet-mapping>

    <servlet-name>Post</servlet-name>
    <url-pattern>/Post</url-pattern>

</servlet-mapping>

```

Output :

Employee	abcd
phone	1234567890

name=abcd phone=1234567890

Experiment -7

Aim : To write an online Examination using JSP with three tier architecture

ALGORITHM:

STEP 1: Create a user interface form for getting Seat number and Name

STEPc2: Create jsp file which calculates the total marks on the server

STEP 3: Place the jsp file ...\\Tomcat 5.5\\webapps\\Examples\\WEB-INF\\jsp\\ folder.

STEP 4: Create a data base to store the existing user details. If a new login has to be created, then display the corresponding page.

STEP 5: Create a table in MS ACCESS or ORACLE that contains three fields .

STEP 6: Create a DSN to map the Microsoft Access Driver using ODBC in Administrative Tools.

STEP 7: Import java.sql.* in the java program to execute the SQL queries.

STEP 8: Load the database driver by using Class.forName().

STEP 9: Create a Connection and Statement Object.

STEP 10: Establish a Database Connection with DSN using DriverManager.getConnection().

STEP 11: Execute the query using executeQuery() and that gets stored in a Resultset.

STEP 12: Until there are records in table specified get the fields in each record one by one and display onto the screen.

STEP 13: Close the Statement and Connection Object.

STEP 14: Display the results

home.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Online Exam - Divyansh</title>
    <script language="javascript">
        function exam(form)
        {
            var i=0;
            if(form.one[2].checked)
                i=i+1;
            if(form.three[0].checked)
                i=i+1;
            if(form.four[0].checked)
                i=i+1;
            if(form.five[1].checked)
                i=i+1;
            window.alert("Thank You Taking Online Exam! Your Score is: "+i);
        }
    </script>

    <style type = "text/css" media = "all">
        body{
            font-family:'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
            background-color: rgba(255, 255, 128, .5);
            text-align: center;
        }
    </style>

```

```

        }

    .centre{
        text-align: center;
        margin-left:auto;
        margin-right:auto;
    }

    .buttons{
        border-radius: 1rem;
        border-style: solid;
        color: lightseagreen;
        background-color: mintcream;
        font-size: 1.5rem;
    }

    .buttons:hover{
        color: rgb(178, 32, 171);
        background-color: rgb(255, 249, 245);
    }

}

</style>

</head>
<body>

<h1 class="centre">OnLine Examination</h1>

<form class="centre"
action="http://localhost:8080/examples/jsp/exam/exam.jsp" method=post name="f1"> ' 
    <table class="centre">

        <tr>

            <td><h3>Seat Number:</h3></td>

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

        </tr>

        <tr>

            <td><h3>Name:</h3></td>

            <td><input type="text" name="name" size="50"></td> </tr>

            <br/>

            <tr>

                <td><b>Total Marks:10(Each question carries equal marks)</b></td>
                <td></td><td></td><td></td><td></td><td><b>Time: 15 Min.</b></td>
            </tr>

        </table>

        <br/>

```

```

<b>1. Apache is an open source web server</b><br/> <input type="radio"
name="group1" value="True">True <input type="radio" name="group1"
value="False">False

<br/>

<b>2. In Modern PC there is no cache memory.</b><br/> <input
type="radio" name="group2" value="True">True <input type="radio" name="group2"
value="False">False <br/>

<b>3. Tim-Berner Lee is the originator of Java.</b><br/> <input
type="radio" name="group3" value="True">True <input type="radio" name="group3"
value="False">False <br/>

<b>4. JPG is not a video file extension.</b><br/>

<input type="radio" name="group4" value="True">True <input
type="radio" name="group4" value="False">False <br/>

<b>5. HTTP is a statefull protocol</b><br/>

<input type="radio" name="group5" value="True">True
<input type="radio" name="group5" value="False">False
<br/>

<input class="button" type = "submit" value="Submit">
<input class="button" type = "reset" value="Clear"><br><br>

</form>

</body>
</html>

```

exam.jsp:

```

<%@ page language="java"
contentType="text/html"%> <%@ page
import="java.sql.*"%> <%@ page
import="java.util.*"%>

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

```

```
int a1=0,a2=0,a3=0,a4=0,a5=0;

Connection conn=null;

ResultSet rs=null;

Statement stmt=null;

Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");

String url="jdbc:odbc:S1";

conn=DriverManager.getConnection(url,"","");
String myquery;

out.write("Connected with Database....");

String seatno=request.getParameter("seatno");

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

String ans1=request.getParameter("group1");

if(request.getParameter("group1")!=null){

    if(ans1.equals("True"))

        a1=1;

    else

        a1=0;

}

String ans2=request.getParameter("group2");

if(request.getParameter("group2")!=null){

    if(ans2.equals("True"))

        a2=0;

    else

        a2=1;

}

String ans3=request.getParameter("group3");

if(request.getParameter("group3")!=null){

    if(ans3.equals("True"))

        a3=0;

    else

        a3=1;

}
```

```

    a3=1;

}

String ans4=request.getParameter("group4");

if(request.getParameter("group4")!=null){

    if(ans4.equals("True"))

        a4=1;

    else

        a4=0;

}

String ans5=request.getParameter("group5");

if(request.getParameter("group5")!=null){

    if(ans5.equals("True"))

        a5=0;

    else

        a5=1;

}

int tot=a1+a2+a3+a4+a5;

if(seatno!=""){

    stmt=conn.createStatement();

    myquery="INSERT INTO STUDENTTABLE VALUES('"+seatno+"','"+name+"','"+tot+"')";

    stmt.executeUpdate(myquery);

    stmt.close();

}

stmt=conn.createStatement();

myquery="select * from StudentTable";

rs=stmt.executeQuery(myquery);

%>

<!DOCTYPE html>
<html lang="en">
<head>

```

```
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Online Exam - Divyansh</title>
<script language="javascript">
    function exam(form)
    {
        var i=0;
        if(form.one[2].checked)
            i=i+1;
        if(form.three[0].checked)
            i=i+1;
        if(form.four[0].checked)
            i=i+1;
        if(form.five[1].checked)
            i=i+1;
        window.alert("Thank You Taking Online Exam! Your Score is: "+i);
    }
</script>

<style type = "text/css" media = "all">

body{
    font-family:'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
    background-color: rgba(255, 255, 128, .5);
    text-align: center;
}

.centre{
    text-align: center;
    margin-left:auto;
    margin-right:auto;
}

table, th, td {
    border: 1px black solid;
}

th, td {
    padding: 20px;
```

```

        background-color:none;
    }
</style>

</head>
<body class="centre">

<h1>Student Database</h1> <br/>

<table class="centre">

<tr>
    <td><b>Seat No</b></td>
    <td><b>Name</b></td>
    <td><b>Mark</b></td>
</tr>
<%
    while(rs.next()){
        out.println("<tr>");
        out.println("<td>" + rs.getString(1) + "</td>");
        out.println("<td>" + rs.getString(2) + "</td>");
        out.println("<td>" + rs.getString(3) + "</td>");
        out.println("</tr>");
    }
    rs.close();
    stmt.close();
    conn.close();
%>
</table>
<br/><br/>
<h1>Thanks!....</h1>
</body>
</html>

```

Output :

OnLine Examination

Seat Number:

1234

Name:

abcd

Total Marks: 10 (Each question carries equal marks)

Time: 15 Min.

1. Apache is an open source web server

True False

2. In Modern PC there is no cache memory

True False

3. Tom Berner Lee is the originator of Java.

True False

4. JPG is not a video file extension.

True False

5. HTTP is a statefull protocol

True False

Student Database

Seat No	Name	Mark
1234	abcd	3

Thanks!....

Experiment - 8

AIM – Program to perform XML-Schema-XSLT/XSL

Algorithm:

Step 1: Start the Program

Step 2: Create a root process for food

Step 3: Create a style for XSLT with focus on each item

Step 4: Output the items

Step 5: Stop

STRUCTURE.XML

```
<?xml version="1.0" encoding="UTF-8"?>

<?xml-stylesheet type="text/xsl" href="stock.xsl"?>

<breakfast_menu>

<food>

<name>apple</name>

<price>$4.56</price>

<description>good energy</description>

<calories>650</calories>

</food>

<food>

<name>strawberry</name>

<price>$56.7</price>

<description>a good ice cream</description>

<calories>450</calories>
```

```

</food>

<food>

<name>chapathy</name>

<price>$5.89</price>

<description>morning meal</description>

<calories>780</calories>

</food>

<food>

<name>bread</name>

<price>$6.78</price>

<description>with jam and butter</description>

<calories>670</calories>

</food>

</breakfast_menu>

```

STOCK.XSL

```

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

<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"> <xsl:template
  match="/">

<html>

<body bgcolor="tomato">

  <h2><center>FOOD STRUCTURE</center></h2>

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

    <tr bgcolor="silver">

```

```

<th>Name</th>
<th>Price</th>
<th>Description</th>
<th>Calories</th>
</tr>
<xsl:for-each select="breakfast_menu/food">
<tr bgcolor="tan">
<td><xsl:value-of select="name"/></td>
<td><xsl:value-of select="price"/></td>
<td><xsl:value-of select="description"/></td>
<td><xsl:value-of select="calories"/></td>
</tr>
</xsl:for-each>
</table></body> </html>
</xsl:template>
</xsl:stylesheet>

```

OUTPUT:

FOOD STRUCTURE				
Name	Price	Description	Calories	
apple	\$4.56	good energy	650	
strawberry	\$56.7	a good ice cream	450	
chapathy	\$5.89	morning meal	780	
bread	\$6.78	with jam and butter	670	