

PRACTICAL 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”.

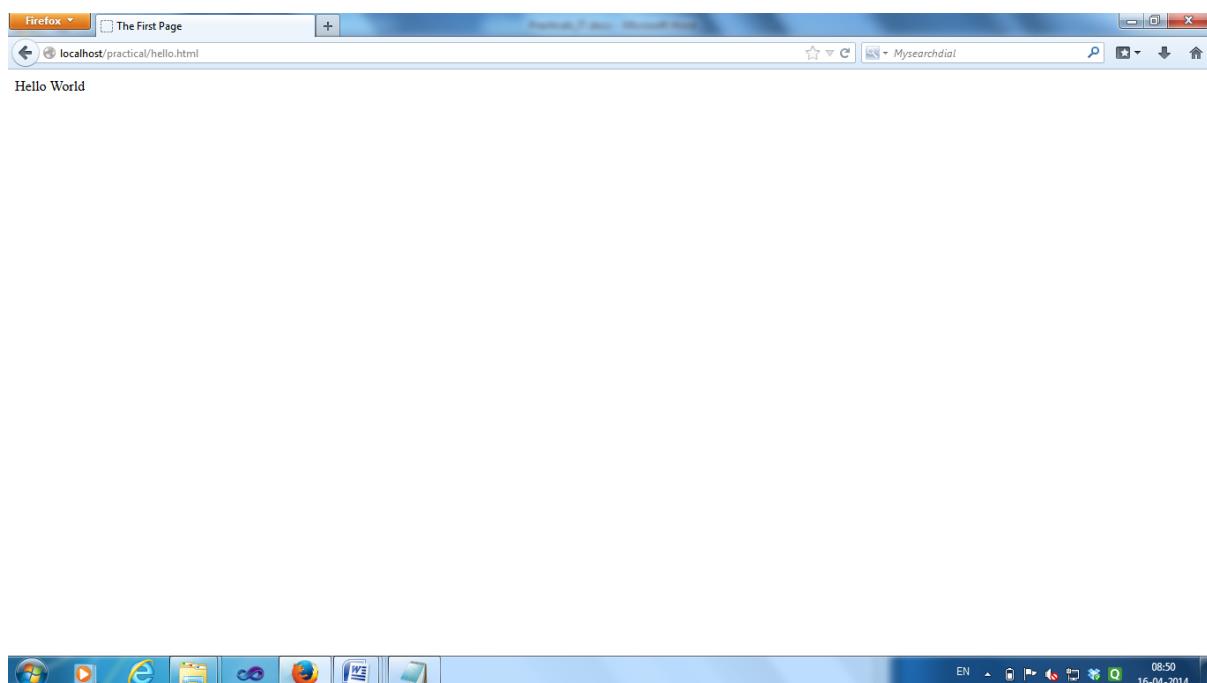
Basic HTML Document

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



Following are more sub tags of <Head>

<HTML>

<HEAD> has sub-elements that define header material:

<TITLE> document title. The title of your document is what appears in a web browser's Favourite or Bookmark list. Search engines on the Internet use the document's title for indexing purposes.

</TITLE>

<BASE> can be used to record the document's location in the form of a URL. </BASE>

<ISINDEX> indicates to the browser that the document is an index document. This is used only if the document is on a server that does indexing.

</ISINDEX>

<LINK> indicates a relationship between this document and some other object on the Web.

</LINK>

<META> provides information such as the page's keywords and description that appears in HTTP headers.

</META>

<SCRIPT> contains either JAVA Script or VB Script </SCRIPT>

<STYLE> contains information used by cascading style sheets </STYLE>

</HEAD>

<BODY>

the remaining HTML elements are contained within these tags.

</BODY>

</HTML>

PRACTICAL 2

Create a static webpage using table tags of HTML

```
<html>
<body>
<TABLE BORDER="1" CELLPADDING="2">
    <CAPTION ALIGN="Top"><b>Specification Table with Hours
and Marks</b><CAPTION>
    <TR>
        <TH ROWSPAN="2">Unit No.</TH>
        <TH ROWSPAN="2">Unit Title</TH>
        <TH ROWSPAN="2">Teaching Hours</TH>
        <TH Colspan="4">Distribution of Theory Marks</TH>
    </TR>
    <TR>
        <TD>R Level </TD>
        <TD>U Level </TD>
        <TD>A Level </TD>
        <TD>Total Marks </TD>
    </TR>
    <TR>
        <TD> <center>I </TD>
        <TD>Introduction to Internet Technology</TD>
        <TD><center>2</TD>
        <TD><center>4</TD>
        <TD><center>4</TD>
        <TD><center>0</TD>
        <TD><center>8</TD>
    </TR>
    <TR>
        <TD> <center>II </TD>
        <TD>Basics of HTML & CSS</TD>
        <TD><center>6</TD>
        <TD><center>0</TD>
        <TD><center>2</TD>
        <TD><center>6</TD>
        <TD><center>8</TD>
    </TR>
    <TR>
        <TD> <center>III </TD>
        <TD>Active Server Pages 3.0</TD>
        <TD><center>6</TD>
        <TD><center>4</TD>
        <TD><center>8</TD>
        <TD><center>0</TD>
        <TD><center>12</TD>
    </TR>
    <TR>
        <TD> <center>IV </TD>
        <TD>Server Side Coding with VBScript and XML</TD>
        <TD><center>8</TD>
        <TD><center>2</TD>
        <TD><center>4</TD>
        <TD><center>8</TD>
```

```

<TD><center>14</TD>
</TR>
<TR>
<TD> <center>V </TD>
<TD>ASP Objects & Components</TD>
<TD><center>10</TD>
<TD><center>4</TD>
<TD><center>4</TD>
<TD><center>6</TD>
<TD><center>14</TD>
</TR>
<TR>
<TD> <center>VI </TD>
<TD>Accessing database with ASP & ADO</TD>
<TD><center>10</TD>
<TD><center>4</TD>
<TD><center>4</TD>
<TD><center>6</TD>
<TD><center>14</TD>
</tr>
<TR>
<TD> </TD>
<TD><center><b>Total</b></TD>
<TD><center><b>42</b></TD>
<TD><center><b>18</b></TD>
<TD><center><b>26</b></TD>
<TD><center><b>26</b></TD>
<TD><center><b>70</b></TD>
</tr>
</TABLE>
</body>
</html>

```

OUTPUT

Specification Table with Hours and Marks

Unit No.	Unit Title	Teaching Hours	Distribution of Theory Marks			
			R Level	U Level	A Level	Total Marks
I	Introduction to Internet Technology	2	4	4	0	8
II	Basics of HTML & CSS	6	0	2	6	8
III	Active Server Pages 3.0	6	4	8	0	12
IV	Server Side Coding with VBScript and XML	8	2	4	8	14
V	ASP Objects & Components	10	4	4	6	14
VI	Accessing database with ASP & ADO	10	4	4	6	14
Total		42	18	26	26	70

PRACTICAL 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>
        </table>
    </center>
</body>
</html>
```

```

<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
	Bold
<I>	<i>Italic</i>
<U>	<u>Underline</u>
	<i>Emphasis</i>
	STRONG
<TELETYPE>	TELETYPE
<CITE>	<i>Citation</i>
<STRIKE>	strike through text
<BIG>	text in a big font
<SMALL>	<small>text in a small font</small>
<SUB>	a _b
<SUP>	a ^b

PRACTICAL 4

Create webpage using list tags of HTML

```
<html>
<body>
    <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

PRACTICAL 5

Create webpage to include image using HTML tag

```
<html>
    <body background="Desert.jpg">
        <center>
    </body>
</html>
```

PRACTICAL 6

Create employee registration webpage using HTML form objects

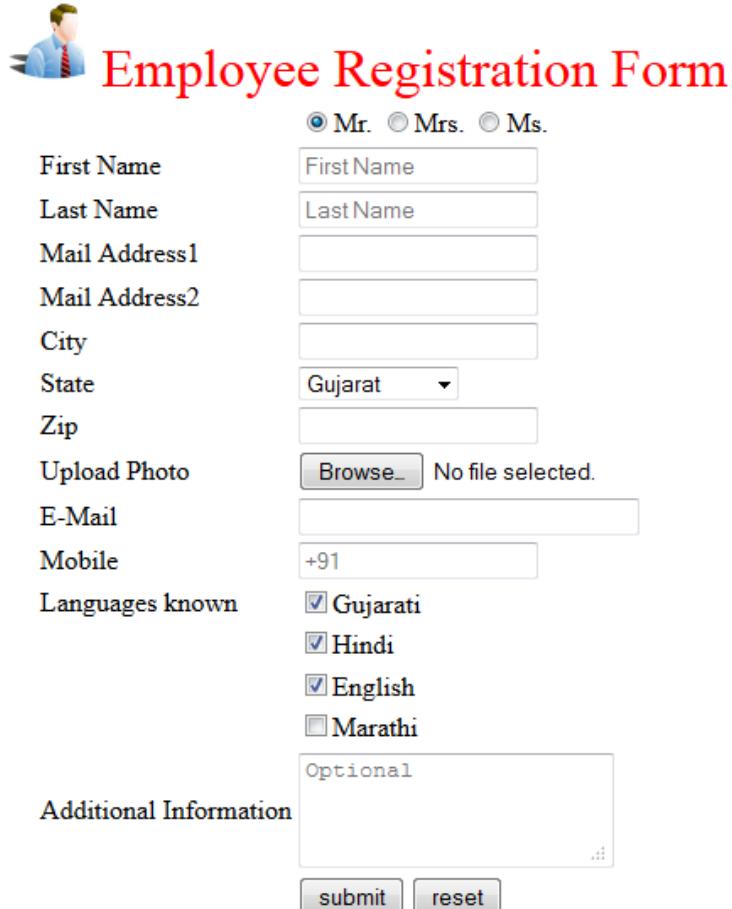
```
<html>
<body>
    <Center>
        
        <font size="+3" color=red>Employee Registration Form</font>
        <form method=post action="prac.html">
<table>
<tr>
    <td></td>
    <td><input type=radio name=initial checked>Mr.
        <input type=radio name=initial>Mrs.
        <input type=radio name=initial>Ms.</td>
</tr><tr>
    <td>First Name</td>
    <td><input type=text name=fn placeholder="First Name"></td>
</tr><tr>
    <td>Last Name</td>
    <td><input type=text name=ln placeholder="Last Name"></td>
</tr> <tr>
    <td>Mail Address1</td>
    <td><input type=text name=add1></td>
</tr><tr>
    <td>Mail Address2</td>
    <td><input type=text name=add2></td>
</tr><tr>
    <td>City</td>
    <td><input type=text name=ct></td>
</tr><tr>
    <td>State</td>
    <td><select name=state>
        <option value="Gujarat">Gujarat
        <option value="Maharastra">Maharastra
        <option value="Karnataka">Karnataka
        <option value="Delhi">Delhi
    </select>
    </td>
</tr><tr>
    <td>Zip</td>
    <td><input type=text name=zp></td>
</tr><tr>
    <td>Upload Photo</td>
    <td><input type=file name=photo></td>
</tr><tr>
    <td>E-Mail</td>
    <td><input type=text name=email size=30></td>
</tr><tr>
    <td>Mobile</td>
    <td><input type=text name=mob placeholder="+91"></td>
</tr><tr>
    <td>Languages known</td>
    <td><input type=checkbox name=lk value=Gujarati checked>Gujarati</td>
```

```

</tr><tr>
    <td></td>
    <td><input type=checkbox name=lk value=Hindi checked>Hindi</td>
</tr><tr>
    <td></td>
    <td><input type=checkbox name=lk value=English checked>English</td>
</tr><tr>
    <td></td>
    <td><input type=checkbox name=lk value=Marathi >Marathi</td>
</tr><tr>
    <td>Additional Information</td>
    <td><textarea name=add rows=3 cols=20 placeholder="Optional" wrap></textarea></td>
</tr><tr>
    <td></td>
    <td><input type=submit value=submit>&ampnbsp<input type=reset value=reset></td>
</table>
</form>
</body>
</html>

```

OUTPUT



The form is titled "Employee Registration Form" and features a male icon. It includes fields for First Name, Last Name, Mail Address1, Mail Address2, City, State (Gujarat), Zip, Upload Photo (with a "Browse..." button and "No file selected." message), E-Mail, Mobile (+91), Languages known (checkboxes for Gujarati, Hindi, English, Marathi, with Gujarati checked), Additional Information (a text area with placeholder "Optional"), and submit/reset buttons.

<input checked="" type="radio"/> Mr. <input type="radio"/> Mrs. <input type="radio"/> Ms.	
First Name	<input type="text"/>
Last Name	<input type="text"/>
Mail Address1	<input type="text"/>
Mail Address2	<input type="text"/>
City	<input type="text"/>
State	Gujarat <input type="button" value="▼"/>
Zip	<input type="text"/>
Upload Photo	<input type="button" value="Browse..."/> No file selected.
E-Mail	<input type="text"/>
Mobile	+91 <input type="text"/>
Languages known	<input checked="" type="checkbox"/> Gujarati <input checked="" type="checkbox"/> Hindi <input checked="" type="checkbox"/> English <input type="checkbox"/> Marathi
<input type="text" value="Optional"/> Additional Information <input type="text"/>	
<input type="button" value="submit"/> <input type="button" value="reset"/>	

PRACTICAL 7

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.

PRACTIAL 8

Introduction to IIS. Installation of IIS server in windows 7.

Unlike normal HTML pages, you cannot view Active Server Pages without running a web-server. To test your own pages, you should save your pages in a directory mapped as a virtual directory, and then use your web-browser to view the page.

At this point, you should have a good idea of what ASP is and how it functions in conjunction with a Web server. It's time to configure your Web server to work with ASP.

Depending on the type of Windows operating system you are using (NT, 2000, Xp, win-7), you already have a Web server available for your use, but it might not be loaded or configured on your machine.

Installing Internet Information Server in Windows 7

By default, IIS 7 is not installed on Windows 7. You can install IIS by clicking **Windows Features** in **Advanced Options** under **Programs** in Control Panel. Following are the steps to install IIS

1. Click **Start** and then click **Control Panel**.
2. In Control Panel, click **Programs** and then click **Turn Windows features on or off**.

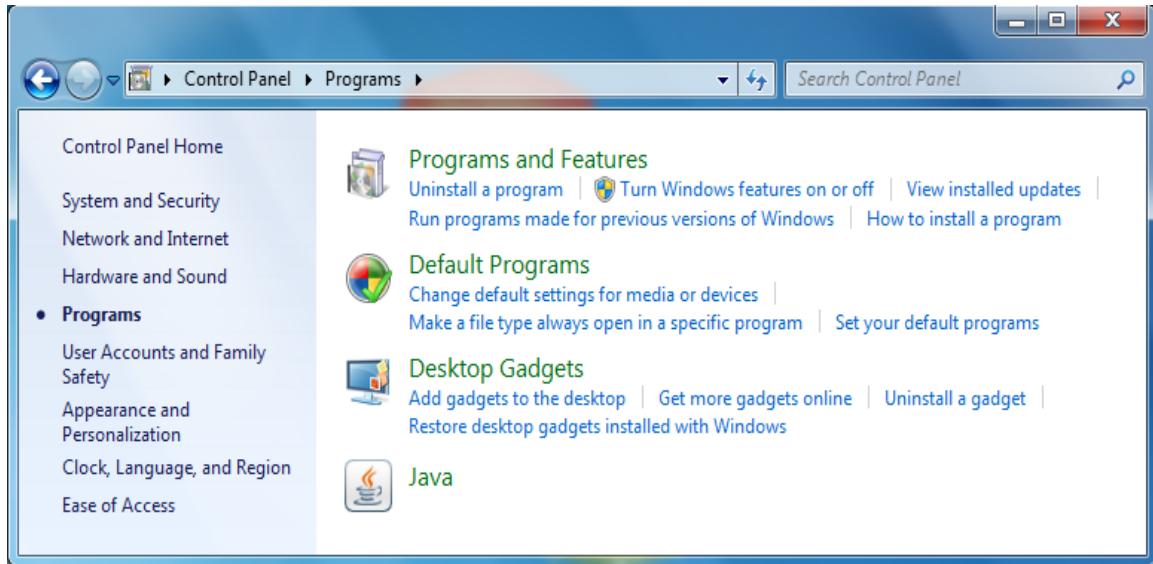


Figure: Turn Windows features on or off under Programs and Features

3. In the Windows Features dialog box, click **Internet Information Services** and then click **OK**. Select ASP and other features (if required) from Application Development Features.
4. After Step 3, installation of IIS with various features will begin. For confirmation of IIS installation type localhost or http://localhost in web browser.

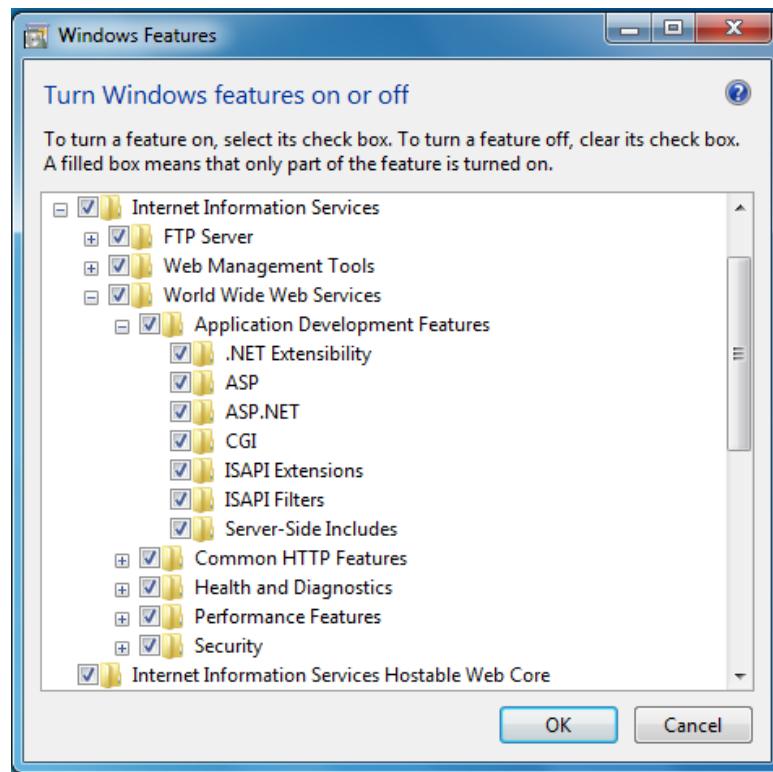


Figure: Application Development Features

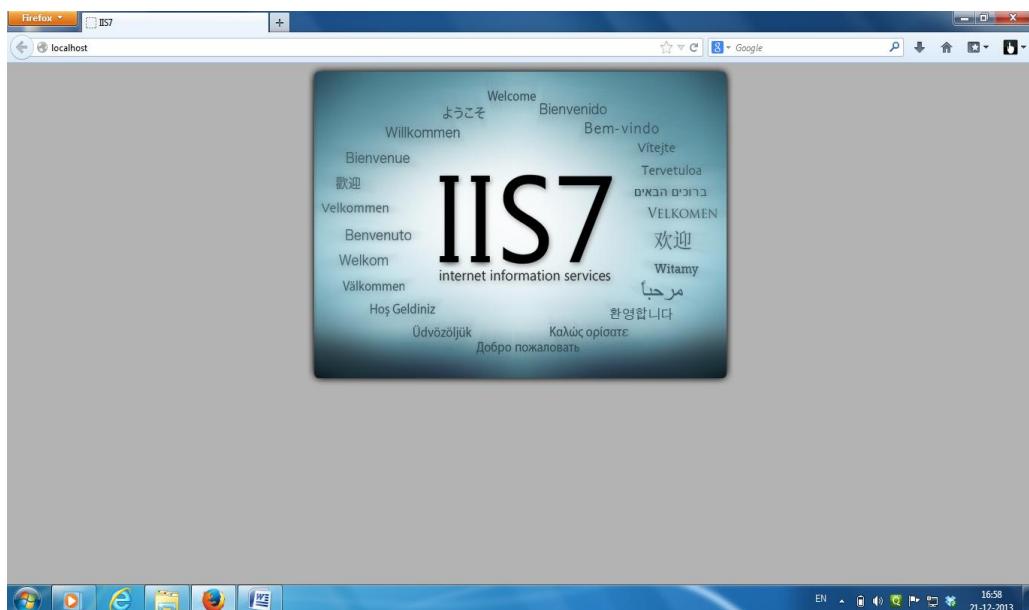


Figure: IIS Home page

Confirming IIS Installation and Managing IIS

Although we'll talk much more about working with our Web server when we begin the discussion on manipulating Web page files, there are a few things you can look at now to get a better idea of how IIS functions on your machine

1. Open the Windows Explorer, and navigate to your C: drive. Find the directory inetpub and select it
2. Think of the inetpub directory as your central location for storing, manipulating, and displaying your Web pages via IIS. As you begin to develop Web pages, you will become quite familiar with the inetpub directories, as well as its sub directories.
3. Aside from the creation of the inetpub directory, take a look at the tools used to administer IIS on your computer.
4. To manage web server select Administrative Tools by clicking Start menu, Settings, Control Panel. For Windows 7 user Select System and Security in Control Panel
5. Select Internet Information Services Manager. It will display Internet Information Services window on your screen.

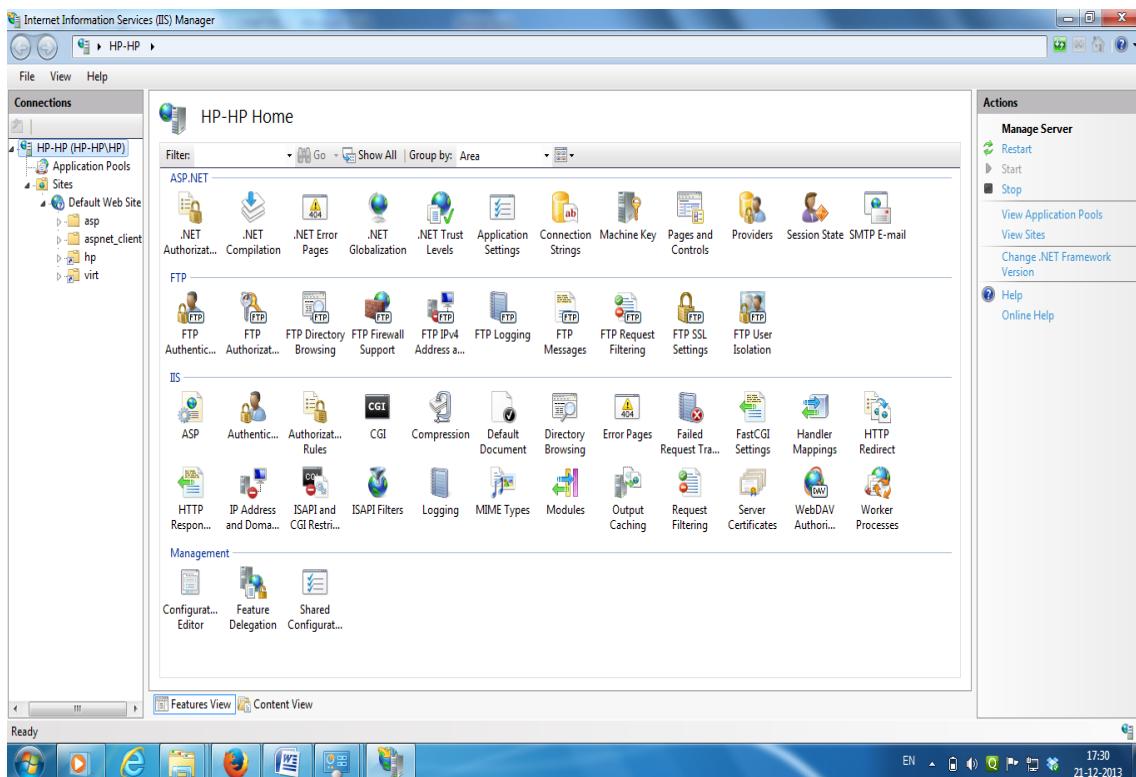


Figure: IIS Manager

PRACTICAL 9

Create a simple xml file and also create dynamic web page in which XML tags used

- Simple XML file: name.xml

```
<Name>
    <First> Sachin </First>
    <Last> Tendulkar </Last>
</Name>
```

- XML with ASP: name.asp

To generate an XML response from the server - simply write the following code and save it as an ASP file on the web server.

```
<%
    response.ContentType="text/xml"
    response.Write("<?xml version='1.0' encoding='ISO-8859-1'?>")
    response.Write("<Name>")
    response.Write("<First>Sachin</First>")
    response.Write("<Last>Tendulkar</Last>")
    response.Write("</Name>")
%>
```

PRACTICAL 10

Create a dynamic web page which displays a message “Welcome to ASP” using VBScript

```
<html>
<body>
<%
    response.Write("Welcome to ASP")
    response.Write("<br>")
    response.Write("HTML")
%
<b> ASP </b>
<%
    response.Write("<br>")
    response.Write("XML")
%
</body>
</html>
```

OUTPUT



PRACTICAL 11

Create a dynamic web page which generates student grade sheet using VBScript

In this practical, three files have been created. Note that here external style sheet "table.css" is used in marksheet.asp file.

marksheet.html

```
<%@ language= vbscript %>
<% option explicit %>
<Html>
<body>
<form method=post action="marksheet.asp">
<b><center><font color=red size=4>Enter Following Detail
</font></b>
<hr>
<table border=1 align=center>
<tr>
    <td>Student Name</td>
    <td><input type=text name=sn placeholder = "Full
Name"></td>
</tr>
<tr>
    <td>Enrollment No.</td>
    <td><input type=text name=en placeholder=" Enrollment
Number "></td>
</tr>
<tr>
    <td>Institute</td>
    <td><input type=text name=inst size=30 placeholder =
"College Name"></td>
</tr>
</table>
<table border=1 align=center>
<CAPTION ALIGN="BOTTOM">*marks less than 70<CAPTION>
<tr>
    <th>Subject Name</th>
    <th>Marks</th>
</tr>
<tr>
    <td>INFORMATION COMMUNICATION
TECHNOLOGY</td>
    <td><input type=text name=ict size=7></td>
</tr>
<tr>
    <td>OBJECT ORIENTED PROGRAMMING</td>
    <td><input type=text name=oop size=7></td>
</tr>
<tr>
    <td>FUNDAMENTALS OF SOFTWARE
DEVELOPMENT</td>
    <td><input type=text name=fosd size=7></td>
</tr>
<tr>
```

```

        <td>INTERNET TECHNOLOGY</td>
        <td><input type=text name=it size=7></td>
    </tr>

    <tr>
        <td>DATA MANAGEMENT</td>
        <td><input type=text name=dm size=7></td>
    </tr>
    <tr>
        <td></td>
        <td><input type=submit value=submit></td>
    </tr>
</table>
</form>
</body>
</html>

```

marksheet.asp

```

<html>
<head>
<TITLE>Grade Sheet</TITLE>
<LINK REL="STYLESHEET" HREF="table.css">
</head>
<% dim total, a, b, c, d, e, name, no, per, cl
    a=request ("ict")
    b=request ("oop")
    c=request ("fosd")
    d=request ("it")
    e=request ("dm")
    name=request("sn")
    no=request("en")
    cl=request("inst")
%>
<% total=a + 0 + b + c + 0 + d + 0 + e + 0 + f %>
<h1> GUJARAT TECHNOLOGICAL UNIVERSITY </h1>
<p>
Name : <%= name %>
<br>
Enrollment Number : <%= no%>
<br> Institute : <%= cl%> </p> <hr>
<table border=1 align=center>
    <tr>
        <th>Subject Name</th>
        <th>Subject Code</th>
        <th>Marks</th>
    </tr>
    <tr>
        <td>INFORMATION COMMUNICATION TECHNOLOGY</td>
        <td>3341601</td>
        <td><%= a%></td>
    </tr>
    <tr>
        <td>OBJECT ORIENTED PROGRAMMING</td>
        <td>3341602</td>
        <td><%= b%></td>
    </tr>
</table>

```

```

</tr>
<tr>
    <td>FUNDAMENTALS OF SOFTWARE DEVELOPMENT</td>
    <td>3341603</td>
    <td><%= c%></td>
</tr>
<tr>
    <td>INTERNET TECHNOLOGY</td>
    <td>3341604</td>
    <td><%= d%></td>
</tr>
<tr>
    <td>DATA MANAGEMENT</td>
    <td>3341605</td>
    <td><%= e%></td>
</tr>
<tr>
    <td colspan=2 align=right><b>Total</b></td>
    <td><%= total%></td>
</tr>
</table>
<center>
<Hr><b>
<% per= (total * 100)\350
response.write "Percentage "
response.write per%
</b><Hr>
<% if per >= 70 then
    response.write "Congratulations You got First Class
with Distinction"
    Elseif per >= 60 and per < 70 then
        response.write "Congratulations You got First Class"
    Elseif per >= 50 and per < 60 then
        response.write "You got Second Class"
    Elseif per >= 35 and per < 50 then
        response.write "You got Pass Class"
    Else
        response.write "Sorry you are Fail"
End if
%>

```

table.css

```

table, td, th
{
    border:1px solid green;
}
td
{
    text-align:center;
}
th
{
    background-color:green;
    color:white;
}

```

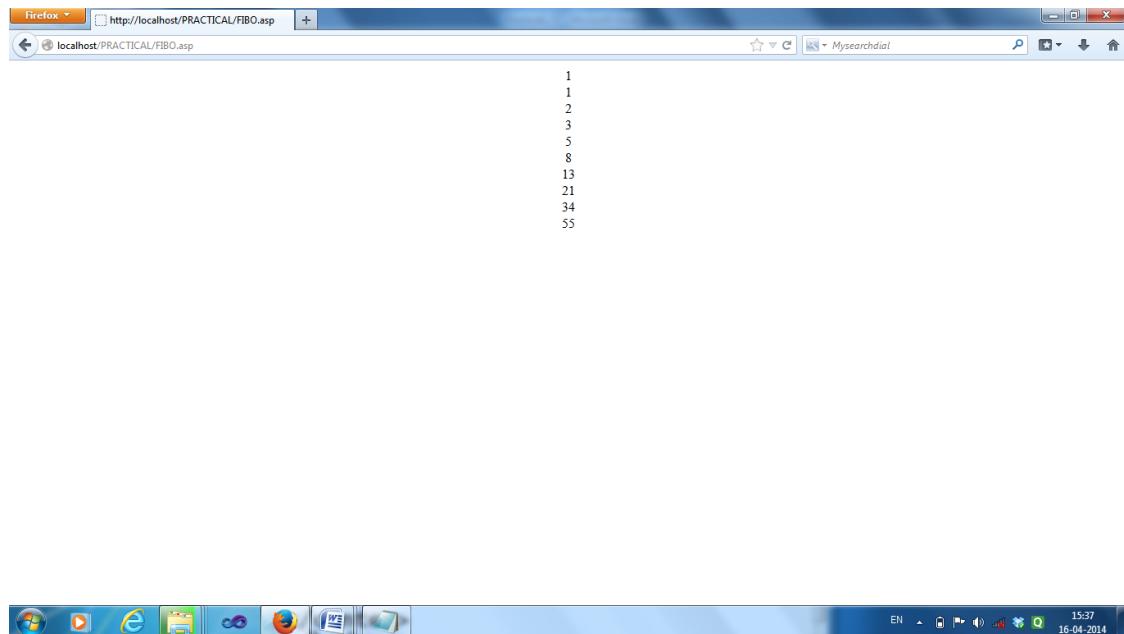
```
h1
{
    text-shadow: 5px 5px 5px #FF0000;text-align:center;
}
p
{
    outline-style:groove;
    outline-color:red;
    font-family:"Times New Roman",Georgia,Serif;
    text-align:center;
    font-weight:bold;
}
```

PRACTICAL 12

Create a dynamic web page which prints Fibonacci series from 1 to 10 in VBScript

```
<html>
  <body>
    <center>
      <% dim a,b,c,i
      a=0
      b=1
      for i=1 to 10
        c=a+b
        response.write b
        response.write "<br/>"
        a=b
        b=c
      next
      %>
    </center>
  </body>
</html>
```

OUTPUT



PRACTICAL 13

Create a dynamic web page which displays factorial of a number in VBScript

fact.html

```
<html>
  <body>
    <head>
      <title> Factorial </title>
    </head>
    <form method=post action=fact.asp>
      <table>
        <tr>
          <td>Enter number</td>
          <td><input type=text name=no></td>
        </tr>
        <tr>
          <td></td>
          <td><input type=submit value=ok></td>
        </tr>
      </table>
    </form>
  </body>
</html>
```

fact.asp

```
<html>
  <body>
    <center>
      Factorial of
    <%
      dim a,b,c
      b=request("no")
      c=1
      for a=1 to b
        c=c*a
      next
      response.write b
      response.write " is "
      response.write c
    %>
  </center>
</body>
</html>
```

PRACTICAL 14

Create a dynamic web page which displays arithmetic operations [addition, subtraction, division, multiplication and modulus] using HTML Frame

frame.asp

```
<Html>
<frameset rows="50%, 50 %">
    <frame src="Form.asp" name="que">
    <frame src="Answer.asp" name="ans">
</frameset>
</html>
```

Form.asp

```
<%@ language= vbscript %>
<% option explicit %>
<Html>
<body>
<form method=post action="answer.asp" target="ans">
<b><center><u><font color=red size=4>Arithmetic Operations</font>
</u></b></center><br><br><br>
<table align=center border=0>
    <tr>
        <td><b>Enter First Number:</b></td>
        <td><input type=text name=n1
placeholder="First Number"></td>
    </tr>
    <tr>
        <td><b>Enter Second Number:</b></td>
        <td><input type=text name=n2
placeholder="Second Number"></td>
    </tr>
    <tr>
        <td><b>Select Your Choice:</b></td>
        <td><select name=opr>
            <option value="Addition">Addition
            <option value="Subtraction">Subtraction
            <option value="Division">Division
            <option value= "Multiplication"> Multiplication
            <option value="Modulus">Modulus
        </select>
    </td>
    </tr>
</table><Br>
<center> <input type = submit value="submit"> </center>
</form>
</body>
</html>
```

Answer.asp

```
<html>
<body>
<% dim a, b, c
a=request ("n1")
```

```

b=request ("n2")
c=request ("opr")
response.write " "
response.write "<br>"
%>
<center><font color=red size=4>
<%
Select case c
    Case "Addition"
        response.write "Addition of "
        response.write a
        response.write " & "
        response.write b
        response.write " is "
        response.write (a + 0 + b)
    Case "Subtraction"
        response.write "Substraction of "
        response.write a
        response.write " & "
        response.write b
        response.write " is "
        response.write (a - b)
    Case "Division"
        response.write "Division of "
        response.write a
        response.write " & "
        response.write b
        response.write " is "
        response.write (a / b)
    Case "Multiplication"
        response.write "Multiplication of "
        response.write a
        response.write " & "
        response.write b
        response.write " is "
        response.write (a * b)
    Case "Modulus"
        response.write "Modulus of "
        response.write a
        response.write " & "
        response.write b
        response.write " is "
        response.write (a mod b)
End select
%>
</font>
</center>
</body>
</html>

```

PRACTICAL 15

Write a script which differentiates Request.QueryString and Request.Form

Request.QueryString Example:

```
<html>
<body>
    <form method=get action="output1.asp">
        Enter First Name: <input type=text name=fname><br>
        Enter Last Name: <input type=text name=lname><br>
        <input type=submit value="submit">
    </form>
</body>
</html>
```

output1.asp

```
<%
    dim fn, ln
    fn = request.querystring("fname")
    ln = request.querystring("lname")

    response.write "Welcome"
    response.write fn
    response.write " "
    response.write ln
%>
```

Request.Form Example:

```
<html>
<body>
    <form method=post action="output2.asp">
        Enter First Name: <input type=text name=fname><br>
        Enter Last Name: <input type=text name=lname><br>
        <input type=submit value="submit">
    </form>
</body>
</html>
```

output2.asp

```
<%
    dim fn, ln
    fn = request.form("fname")
    ln = request.form("lname")

    response.write "Welcome"
    response.write fn
    response.write " "
    response.write ln
%>
```

PRACTICAL 16

Write a suitable scripts which show properties of Response object [Buffer, Expires and ExpiresAbsolute]

1. Response.Buffer Example

```
<%@ language= vbscript %>
<% option explicit %>
<% response.Buffer= true %>
<Html>
    <body>
        <b>
            <font color=red size=3>Response. Buffer Example </font>
        </b> <br>
        <% dim i, j
            response.write "It is now:"
            response.write now
            response.write "<br>"
            For i=1 to 50000000
                j=i+1
            Next
            response.write "It is now:"
            response.write now
        %>
        </body>
</html>
```

OUTPUT

Response. Buffer Example

It is now:23-12-2013 22:41:44
It is now:23-12-2013 22:41:52

2. Response.Expires Example

```
<%@ language= vbscript %>
<% option explicit %>
<% response.Buffer = true %>
<% response.expires = 2%>
<Html>
    <body>
        <b>
            <font color=red size=3>Response. Buffer Example </font>
        </b> <br>
        <% dim i, j
            response.write "It is now:"
            response.write now
            response.write "<br>"
            For i=1 to 50000000
                j=i+1
            Next
            response.write "It is now:"
            response.write now
        %>
        </body>
</html>
```

OUTPUT

Response.Buffer Example

```
It is now:23-12-2013 22:56:00  
It is now:23-12-2013 22:56:07
```

3. Response.ExpiresAbsolute Example

```
<%@ language= vbscript %>  
<% option explicit %>  
<% response.Buffer= true %>  
<% response.ExpireAbsolute = #December 25, 2013# %>  
<Html>  
    <body>  
        <b>  
            <font color=red size=3>Response. Buffer Example </font>  
        </b> <br>  
        <% dim i, j  
            response.write "It is now:"  
            response.write now  
            response.write "<br>"  
            For i=1 to 50000000  
                j=i+1  
            Next  
            response.write "It is now:"  
            response.write now  
        %>  
    </body>  
</html>
```

OUTPUT

Response.Buffer Example

```
It is now:23-12-2013 22:41:44  
It is now:23-12-2013 22:41:52
```

PRACTICAL 17

Write a suitable scripts which show methods of Response object [Clear, End, Flush, Write and Redirect]

1. Response.Clear Example

```
<%@language= vbscript %>
<% option explicit %>
<% response.Buffer= true %>
<Html>
    <body>
        <b><font color=red size=3>Response.Clear Example</font>
        </b> <br>
    <%
        response.write "Before response.Clear"
        response.write "<br>"
        response.write response.Clear
        response.write "After response.Clear"
    %
    </body>
</html>
```

OUTPUT

After response.Clear

2. Response.End Example

```
<%@language= vbscript %>
<% option explicit %>
<% response.Buffer= true %>
<Html>
    <body>
        <b>
            <font color=red size=3>Response.End Example</font>
        </b><br>
    <%
        response.write "Before response.End"
        response.write "<br>"
        response.write response.End
        response.write "After response.End"
    %
    </body>
</html>
```

OUTPUT

Response.End Example

Before response. End

3. Response.Flush Example

```
<%@language= vbscript %>
<% option explicit %>
<% response.Buffer= true %>
```

```

<Html>
  <body>
    <b>
      <font color=red size=3>Response.Flush Example</font>
    </b><br>
    <%
      response.write "Before response.Flush"
      response.write "<br>"
      response.write response.Flush
      response.write "After response.Flush"
    %
  </body>
</html>

```

OUTPUT

Response.Flush Example

Before response.Flush
After response.Flush

4. Response.Redirect Example

```

<%@language= vbscript %>
<% option explicit %>
<% response.Redirect "XYZ.asp" %>
<Html>
  <body>
    <b>
      <font color=red size=3>Response.Redirect Example</font>
    </b> <br>
    <%
      response.write "Before response.Flush"
      response.write "<br>"
      response.write response.Flush
      response.write "After response.Flush"
    %
  </body>
</html>

```

OUTPUT

(output of XYZ.asp)

5. Response.Write Example

```

<% Response.Write ("Hello") %>

or

<%= "Hello" %>

```

PRACTICAL 18

Write a suitable scripts which show methods of Server object [HTML Encode, URL Encode, Mappath, Execute and Transfer]

1. HTML Encode Example

```
<% option explicit %>
<Html>
    <Body>
        <%= Server.HTMLEncode ("The paragraph tag: <P>") %>
    </Body>
</Html>
```

OUTPUT

The paragraph tag: <P>

2. URL Encode Example

```
<% option explicit %>
<Html>
    <Body>
        <%= Server.URLEncode("http://www.bbit.ac.in") %>
    </Body>
</Html>
```

OUTPUT

http%3A%2F%2Fwww%2Ebit%2Eac%2Ein

3. Mappath Example

ser_map.asp

```
<% option explicit %>
<%= server.mappath (request.servervariables ("path_info")) %>
```

OUTPUT

c:\inetpub\wwwroot\ser_map.asp

4. Execute Example

A.asp

```
<%= "Hello world" %>
<% server.Execute ("B.asp") %>
<%= "how r u?" %>
```

B.asp

```
<%= "hi" %>
```

OUTPUT

Hello world hi how r u?

5. Transfer Example

A.asp

```
<%= "Hello world" %>
<% server.Execute ("B.asp") %>
<%= "how r u?" %>
```

B.asp

```
<%= "hi" %>
```

OUTPUT

Hello world hi

PRACTICAL 19

Write a script which creates and retrieves Cookies information

ABC.asp (Reading Cookies using Request Object)

```
<% option explicit %>
<%
    Dim searchterms, Date, objad
    Searchterms = request.cookies ("lastsearch") ("terms")
    Date= request.cookies ("lastsearch") ("date")
%>
<Html>
<Body>
    <form method=post action="XYZ. asp"><center>
<Br><Br>
<b> <center>Search What You Want ....</center></b>
<%
    If isdate (date) then
        response.write "(last visited on " & now & ")"
    End if
%>
<Hr>
<Center><font color=yellow size=10> Google:
<input type=text name=terms value="<%= searchterms %>"< Br><Br>
<input type=submit value="search"> </Center>
<% set objad = nothing %>
</form>
</body>
</html>
```

XYZ.asp (Write Cookies using Response object)

```
<% option explicit %>
<%
    Dim Stirms
    Stirms=request ("terms")
    Response. Cookies ("lastsearch") ("terms") = stirms
    Response. Cookies ("lastsearch") ("date") = date
    Response. Cookies ("lastsearch").expires = date + 365
%>
<Html>
<Body>
<b><center>
    <font color=red size=30>Information Here... </font>
</center></b><br>
To try another search, <a href = "ABC.asp">click here</a>
</body>
</html>
```

PRACTICAL 20

Introduction to Global.asa file and it's firing sequence

The global.asa file is a special file that handles session and application events. This file must be spelled exactly as it is here on this page and it must be located in your websites root directory.

For example, we use the global.asa file on this website to display the number of Active Users on our site. Rather than inputting data into a database and keeping a stored record of it, our global.asa file acts as a monitor of how many users are visiting any page our website.

Example

```
<SCRIPT LANGUAGE="VBScript" RUNAT="Server">

Sub Application_OnStart
    'Set our user count to 0 when we start the server
    Application ("ActiveUsers") = 0
End Sub

Sub Session_OnStart
    'Change Session Timeout to 20 minutes (if you need to)
    Session.Timeout = 20
    ' Set a Session Start Time
    ' this is only important to assure we start a session
    Session ("Start") = Now
    'Increase the active visitors count when we start the session

    Application.Lock
    Application("ActiveUsers")=Application ("ActiveUsers")+1
    Application.UnLock
End Sub

Sub Session_OnEnd
    'Decrease the active visitors count when the session ends.
    Application.Lock
    Application("ActiveUsers")= Application("ActiveUsers")-1
    Application.UnLock
End Sub
</SCRIPT>
```

Firing Sequence of Global.asa File

1. **Application_OnStart:** Occurs when the FIRST user calls the first page in an ASP application. This event occurs after the Web server is restarted or after the Global.asa file is edited. The "Session_OnStart" event occurs immediately after this event.
2. **Session_OnStart** - This event occurs EVERY time a NEW user requests his or her first page in the ASP application.
3. **Session_OnEnd** - This event occurs EVERY time a user ends a session. A user-session ends after a page has not been requested by the user for a specified time.
4. **Application_OnEnd** - This event occurs after the LAST user has ended the session. Typically, this event occurs when a Web server stops. This procedure is used to clean up settings after the Application stops, like delete records or write information to text files.

PRACTICAL 21

Write a suitable script which creates and retrieves Application and Session Variables

1. Application Variable

In this example we will create a Global.asa file that counts the number of current visitors.

- The Application_OnStart subroutine sets the Application variable "visitors" to 0 when the server starts
- The Session_OnStart subroutine adds one to the variable "visitors" every time a new visitor arrives
- The Session_OnEnd subroutine subtracts one from "visitors" each time this subroutine is triggered

The Global.asa file:

```
<script language="vbscript" runat="server">

    Sub Application_OnStart
        Application("visitors")=0
    End Sub

    Sub Session_OnStart
        Application.Lock
        Application("visitors")=Application("visitors")+1
        Application.UnLock
    End Sub

    Sub Session_OnEnd
        Application.Lock
        Application("visitors")=Application("visitors")-1
        Application.UnLock
    End Sub

</script>
```

To display the number of current visitors in an ASP file:

```
<html>
    <body>
        There are
        <%response.write(Application("visitors"))%> online now..
    </body>
</html>
```

2. Session Variable

To create Session variable:

```
<%  
    Session("username")="bbit"  
    Session("code")=605  
%>
```

When the value is stored in a session variable it can be reached from any page in the ASP application. To retrieves Session values:

```
<html>  
    <body>  
        Welcome  
        <% Response.Write(Session("username")) %>  
    </body>  
</html>
```

OUTPUT

Welcome bbit

PRACTICAL 22

Create a dynamic web page which displays Ads using AdRotator Component

Note: This practical works with IIS 5.0 & 6.0 and will not work with IIS 7.0 or above.

Rotator Schedule File

AdRotator.txt

```
REDIRECT AdRotator.asp
WIDTH 440
HEIGHT 60
BORDER 1
*
winxp.gif
-
windows xp
20
nts_iis.gif
-
Microsoft Internet Information Services
60
ie.gif
-
Microsoft Internet Explorer
20
```

AdRotator.asp

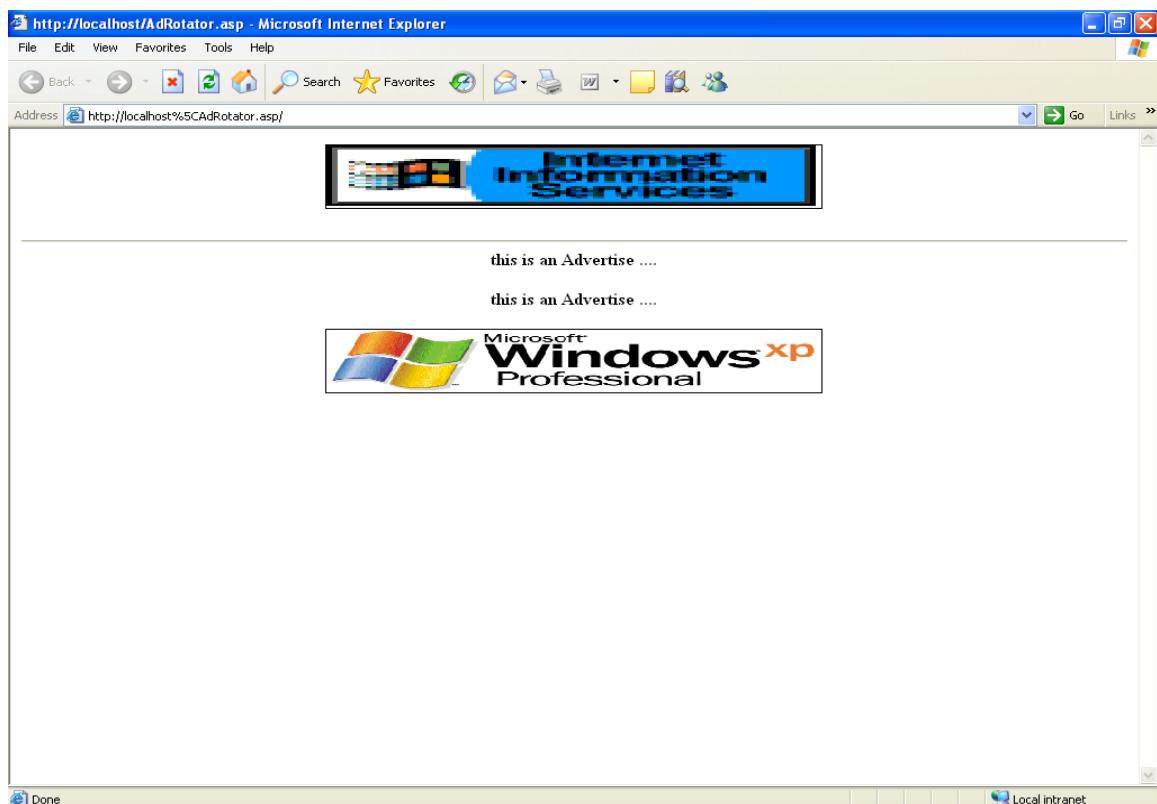
```
<% option explicit %>
<%
    Dim objad
    Set objad = server.createobject ("MSWC.adrotator")
%>
<Html>
    <Body>
        <Center>
            <%= objad.getadvertisement ("AdRotator.txt") %>
        </Center> <br><hr>

        <b><center>this is an Advertise ...</center></b>
        <br>
        <b><center>this is an Advertise ...</center></b>
        <br>

        <Center>
            <%= objad.getadvertisement ("AdRotator.txt") %>
        </Center>

        <% set objad = nothing %>
    </body>
</html>
```

OUTPUT



PRACTICAL 23

Create a dynamic web page which displays capabilities of a web browser using Browser Capabilities Component

```
<%@ LANGUAGE = "VBSCRIPT" %>
<HTML>
    <BODY>
        <% Set objBC = Server.CreateObject ("MSWC.BrowserType") %>
<B> BROWSER CAPABILITIES COMPONENT
<HR> <CENTER>
<TABLE>
    <TR>
        <TD>
            <B> Name of the Web browser
        </TD>
        <TD>
            <%= objBC.browser %>
        </TD>
    </TR>
    <TR>
        <TD>
            <B> Operating system being used
        </TD>
        <TD>
            <%= objBC.platform %>
        </TD>
    </TR>
    <TR>
        <TD>
            <B> Version of the Web browser
        </TD>
        <TD>
            <%= objBC.version %>
        </TD>
    </TR>
    <TR>
        <TD>
            <B> Major version number
        </TD>
        <TD>
            <%= objBC.majorver %>
        </TD>
    </TR>
    <TR>
        <TD>
            <B> Minor version number
        </TD>
        <TD>
            <%= objBC.minorver %>
        </TD>
    </TR>
    <TR>
        <TD>
            <B> Does the Web browser support frames?
        </TD>
    </TR>
```

```

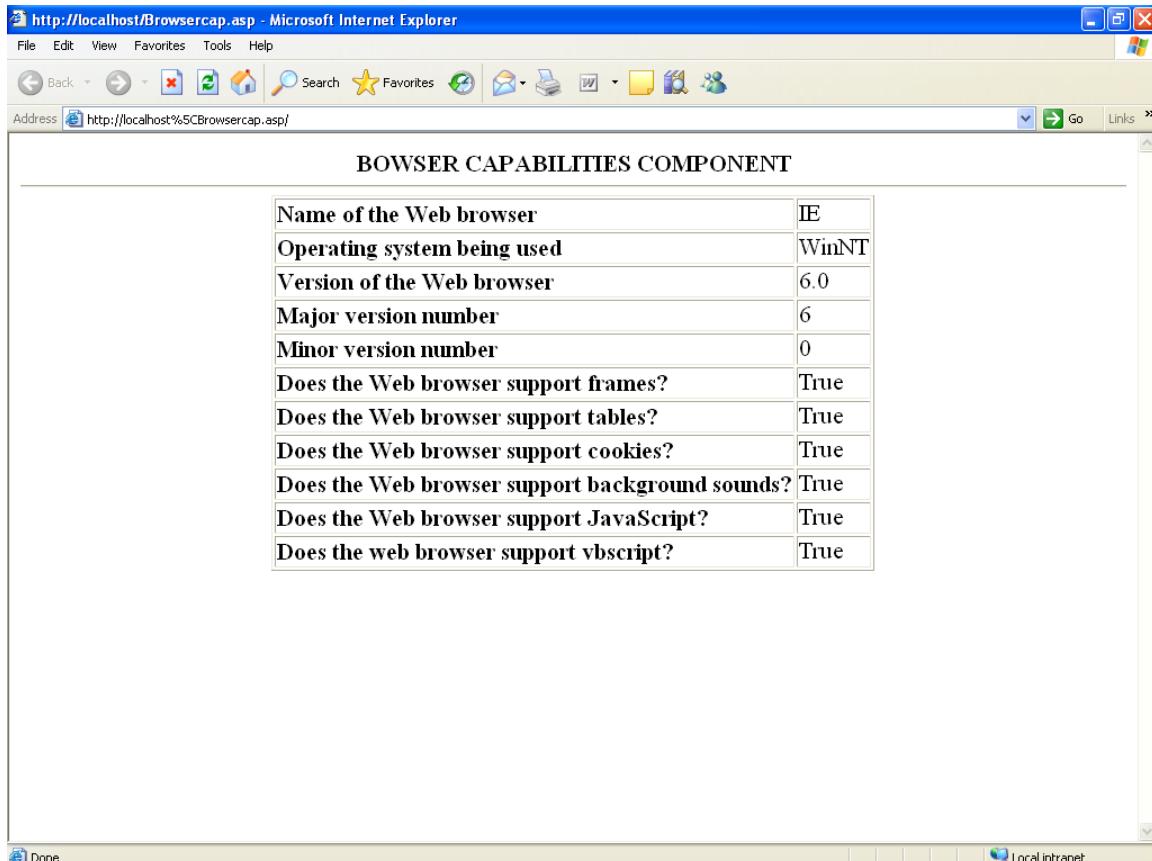
        </TD>
        <TD>
            <%If objBC.frames Then %>
                True
            <%Else %>
                False
            <%End If %>
        </TD>
    </TR>
    <TR>
        <TD>
            <B> Does the Web browser support tables?
        </TD>
        <TD>
            <%If objBC.tables Then %>
                True
            <%Else %>
                False
            <%End If %>
        </TD>
    </TR>
    <TR>
        <TD>
            <B> Does the Web browser support cookies?
        </TD>
        <TD>
            <% If objBC.cookies Then %>
                True
            <%Else %>
                False
            <%End If %>
        </TD>
    </TR>
    <TR>
        <TD>
            <B> Does the Web browser support background sounds?
        </TD>
        <TD>
            <%If objBC.backgroundsounds Then %>
                True
            <%Else %>
                False
            <%End If %>
        </TD>
    </TR>
    <TR>
        <TD>
            <B> Does the Web browser support JavaScript?
        </TD>
        <TD>
            <% If objBC.javascript Then %>
                True
            <%Else %>
                False
            <%End If %>
        </TD>
    
```

```

        </TD>
    </TR>
    <TR>
        <TD>
            <B> Does the web browser support vbscript?
        </TD>
        <TD>
            <%If objBC.vbscript Then %>
                True
            <%Else %>
                False
            <%End If %>
        </TD>
    </TR>
</TABLE> </CENTER>
</BODY>
</HTML>

```

OUTPUT



PRACTICAL 24

Introduction to ADO objects and adovbs.inc file

ADO (ActiveX Data Objects)

The ActiveX Data Objects provide an application level interface to data providers such as Microsoft SQL Server or Microsoft Access. ADO is directly used within ASP to communicate with such databases.

The ADO model contains six objects.

- The **Connection** object connects you to data source and works with databases.
- The **Recordset** object allows you to work with the data in a table. It can be used to read through the rows of a table, modify the rows of a table or collect new data to be added to the table.
- The **Error** object represents an error generated by the data source.
- The **Field** object represents a single column in the table.
- The **Command** object provides another way to create a Recordset object. It combines the Recordset object and Connection object.
- The **Parameters** collection contains any parameters needed by the command. The parameters are stored in **Parameter** object.

ADOVBS.inc File

ADOVBS.inc is a file included with IIS that holds all ADO constants defined. Most ASP scripts use constants with names like 'adOpenForwardOnly' and 'adLockReadOnly' when connecting to databases. These are constants, which are defined in the ADOVBS.inc file and define various connection and recordset properties with English-like names.

To include ADOVBS.inc, add one line to the top of your ASP pages: which reads

```
<!--#include virtual="/adovbs.inc"-->
```

Place the ADOVBS.inc in your root web application directory. The contents of the ADOVBS.inc is listed below for your use. Each assignment must be on a single line. When the entire contents below are copied into a text file, ensure that it appears as a single column.

```
<%  
'---- CursorTypeEnum Values ----  
Const adOpenForwardOnly = 0  
Const adOpenKeyset = 1  
Const adOpenDynamic = 2  
Const adOpenStatic = 3  
  
'---- CursorOptionEnum Values ----  
Const adHoldRecords = &H00000100  
Const adMovePrevious = &H00000200  
Const adAddNew = &H01000400  
Const adDelete = &H01000800  
Const adUpdate = &H01008000  
Const adBookmark = &H00002000  
Const adApproxPosition = &H00004000  
Const adUpdateBatch = &H00010000  
Const adResync = &H00020000  
Const adNotify = &H00040000
```

```
'---- LockTypeEnum Values ----
Const adLockReadOnly = 1
Const adLockPessimistic = 2
Const adLockOptimistic = 3
Const adLockBatchOptimistic = 4

'---- ExecuteOptionEnum Values ----
Const adRunAsync = &H00000010

'---- ObjectStateEnum Values ----
Const adStateClosed = &H00000000
Const adStateOpen = &H00000001
Const adStateConnecting = &H00000002
Const adStateExecuting = &H00000004

'---- CursorLocationEnum Values ----
Const adUseServer = 2
Const adUseClient = 3

'---- DataTypeEnum Values ----
Const adEmpty = 0
Const adTinyInt = 16
Const adSmallInt = 2
Const adInteger = 3
Const adBigInt = 20
Const adUnsignedTinyInt = 17
Const adUnsignedSmallInt = 18
Const adUnsignedInt = 19
Const adUnsignedBigInt = 21
Const adSingle = 4
Const adDouble = 5
Const adCurrency = 6
Const adDecimal = 14
Const adNumeric = 131
Const adBoolean = 11
Const adError = 10
Const adUserDefined = 132
Const adVariant = 12
Const adIDispatch = 9
Const adIUnknown = 13
Const adGUID = 72
Const adDate = 7
Const adDBDate = 133
Const adDBTime = 134
Const adDBTimeStamp = 135
Const adBSTR = 8
Const adChar = 129
Const adVarChar = 200
Const adLongVarChar = 201
Const adWChar = 130
Const adVarWChar = 202
```

```

Const adLongVarWChar = 203
Const adBinary = 128
Const adVarBinary = 204
Const adLongVarBinary = 205

'---- FieldAttributeEnum Values ----
Const adFldMayDefer = &H00000002
Const adFldUpdatable = &H00000004
Const adFldUnknownUpdatable = &H00000008
Const adFldFixed = &H00000010
Const adFldIsNullable = &H00000020
Const adFldMayBeNull = &H00000040
Const adFldLong = &H00000080
Const adFldRowID = &H00000100
Const adFldRowVersion = &H00000200
Const adFldCacheDeferred = &H00001000

'---- EditModeEnum Values ----
Const adEditNone = &H0000
Const adEditInProgress = &H0001
Const adEditAdd = &H0002
Const adEditDelete = &H0004

'---- RecordStatusEnum Values ----
Const adRecOK = &H0000000
Const adRecNew = &H0000001
Const adRecModified = &H0000002
Const adRecDeleted = &H0000004
Const adRecUnmodified = &H0000008
Const adRecInvalid = &H0000010
Const adRecMultipleChanges = &H0000040
Const adRecPendingChanges = &H0000080
Const adRecCanceled = &H0000100
Const adRecCantRelease = &H0000400
Const adRecConcurrencyViolation = &H0000800
Const adRecIntegrityViolation = &H0001000
Const adRecMaxChangesExceeded = &H0002000
Const adRecObjectOpen = &H0004000
Const adRecOutOfMemory = &H0008000
Const adRecPermissionDenied = &H0010000
Const adRecSchemaViolation = &H0020000
Const adRecDBDeleted = &H0040000

'---- GetRowsOptionEnum Values ----
Const adGetRowsRest = -1

'---- PositionEnum Values ----
Const adPosUnknown = -1
Const adPosBOF = -2
Const adPosEOF = -3

```

```

'---- enum Values ----
Const adBookmarkCurrent = 0
Const adBookmarkFirst = 1
Const adBookmarkLast = 2

'---- MarshalOptionsEnum Values ----
Const adMarshalAll = 0
Const adMarshalModifiedOnly = 1

'---- AffectEnum Values ----
Const adAffectCurrent = 1
Const adAffectGroup = 2
Const adAffectAll = 3

'---- FilterGroupEnum Values ----
Const adFilterNone = 0
Const adFilterPendingRecords = 1
Const adFilterAffectedRecords = 2
Const adFilterFetchedRecords = 3
Const adFilterPredicate = 4

'---- SearchDirection Values ----
Const adSearchForward = 1
Const adSearchBackward = -1

'---- ConnectPromptEnum Values ----
Const adPromptAlways = 1
Const adPromptComplete = 2
Const adPromptCompleteRequired = 3
Const adPromptNever = 4

'---- ConnectModeEnum Values ----
Const adModeUnknown = 0
Const adModeRead = 1
Const adModeWrite = 2
Const adModeReadWrite = 3
Const adModeShareDenyRead = 4
Const adModeShareDenyWrite = 8
Const adModeShareExclusive = &Hc
Const adModeShareDenyNone = &H10

'---- IsolationLevelEnum Values ----
Const adXactUnspecified = &Hffffffff
Const adXactChaos = &H00000010
Const adXactReadUncommitted = &H000000100
Const adXactBrowse = &H000000100
Const adXactCursorStability = &H00001000
Const adXactReadCommitted = &H000010000
Const adXactRepeatableRead = &H000100000
Const adXactSerializable = &H001000000
Const adXactIsolated = &H001000000

```

```

'---- XactAttributeEnum Values ----
Const adXactCommitRetaining = &H00020000
Const adXactAbortRetaining = &H00040000

'---- PropertyAttributesEnum Values ----
Const adPropNotSupported = &H0000
Const adPropRequired = &H0001
Const adPropOptional = &H0002
Const adPropRead = &H0200
Const adPropWrite = &H0400

'---- ErrorValueEnum Values ----
Const adErrInvalidArgument = &Hbb9
Const adErrNoCurrentRecord = &Hbcd
Const adErrIllegalOperation = &Hc93
Const adErrInTransaction = &Hcae
Const adErrFeatureNotAvailable = &Hcb3
Const adErrItemNotFound = &Hcc1
Const adErrObjectInCollection = &Hd27
Const adErrObjectNotSet = &Hd5c
Const adErrDataConversion = &Hd5d
Const adErrObjectClosed = &He78
Const adErrObjectOpen = &He79
Const adErrProviderNotFound = &He7a
Const adErrBoundToCommand = &He7b
Const adErrInvalidParamInfo = &He7c
Const adErrInvalidConnection = &He7d
Const adErrStillExecuting = &He7f
Const adErrStillConnecting = &He81

'---- ParameterAttributesEnum Values ----
Const adParamSigned = &H0010
Const adParamNullable = &H0040
Const adParamLong = &H0080

'---- ParameterDirectionEnum Values ----
Const adParamUnknown = &H0000
Const adParamInput = &H0001
Const adParamOutput = &H0002
Const adParamInputOutput = &H0003
Const adParamReturnValue = &H0004

'---- CommandTypeEnum Values ----
Const adCmdUnknown = &H0008
Const adCmdText = &H0001
Const adCmdTable = &H0002
Const adCmdStoredProc = &H0004

'---- SchemaEnum Values ----
Const adSchemaProviderSpecific = -1

```

```
Const adSchemaAsserts = 0
Const adSchemaCatalogs = 1
Const adSchemaCharacterSets = 2
Const adSchemaCollations = 3
Const adSchemaColumns = 4
Const adSchemaCheckConstraints = 5
Const adSchemaConstraintColumnUsage = 6
Const adSchemaConstraintTableUsage = 7
Const adSchemaKeyColumnUsage = 8
Const adSchemaReferentialConstraints = 9
Const adSchemaTableConstraints = 10
Const adSchemaColumnsDomainUsage = 11
Const adSchemaIndexes = 12
Const adSchemaColumnPrivileges = 13
Const adSchemaTablePrivileges = 14
Const adSchemaUsagePrivileges = 15
Const adSchemaProcedures = 16
Const adSchemaSchemata = 17
Const adSchemaSQLLanguages = 18
Const adSchemaStatistics = 19
Const adSchemaTables = 20
Const adSchemaTranslations = 21
Const adSchemaProviderTypes = 22
Const adSchemaViews = 23
Const adSchemaViewColumnUsage = 24
Const adSchemaViewTableUsage = 25
Const adSchemaProcedureParameters = 26
Const adSchemaForeignKeys = 27
Const adSchemaPrimaryKeys = 28
Const adSchemaProcedureColumns = 29
```

%>

PRACTICAL 25

Introduction to DSN. Create System DSN Connection for web application

DSN (Data Source Name)

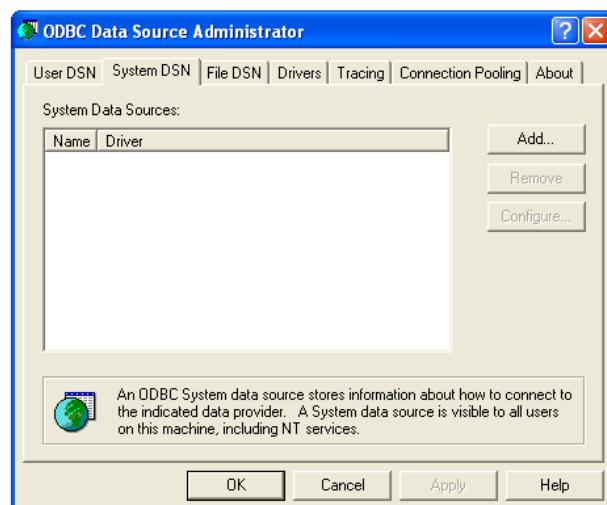
A data source name (DSN) is a data structure that contains the information about a specific database that an Open Database Connectivity (ODBC) driver needs in order to connect to it.

DSN, which resides either in the registry or as a separate text file, is information such as the name, directory and driver of the database.

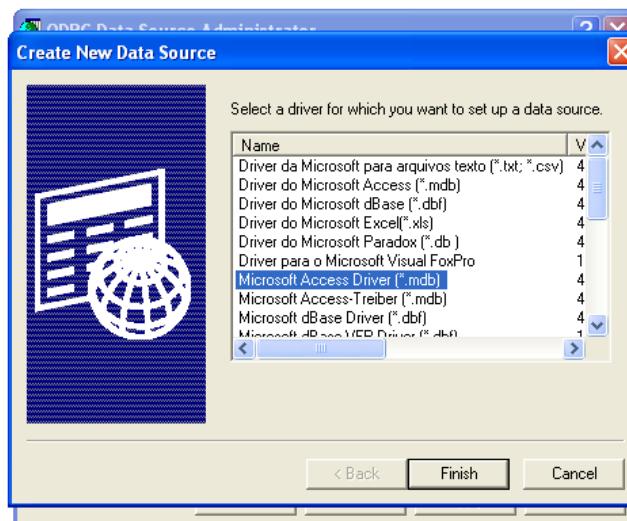
Creating System DSN with MS Access Database

For Windows 7 user, first open Control Panel then select System and Security option in which select Administrative Tools options. Double click on ODBC Data Source Administrator icon.

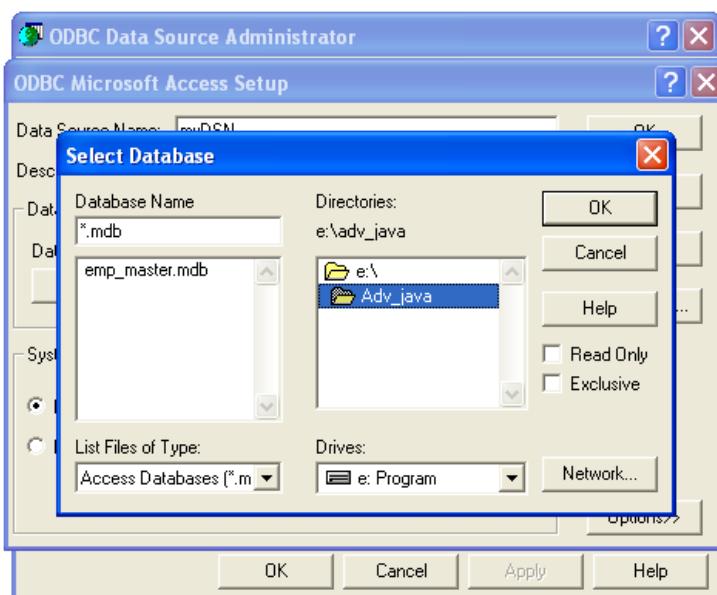
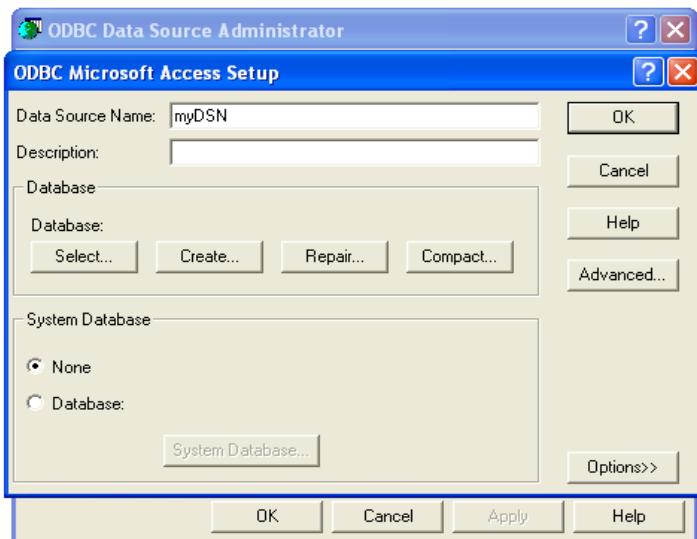
Now you will see ODBC Data Source Administrator window (as shown below). Select System DSN tab, and click Add.



Click Add button and then select the Microsoft Access Driver and click finish



Enter a Data Source Name and description for the connection.
 Then choose to create a new database or select an existing .mdb file from the hard disk then click ok to finish the process.



After creating the System DSN use that connection for a particular ASP page. The following script shows System DSN named myDSN:

```
<%
Set con = Server.CreateObject ("ADODB.Connection")
Con.Open "DSN = myDSN"
%>
```

PRACTICAL 26

Write a suitable script which displays records from the database

```
<%@ LANGUAGE = VBScript %>
<% option explicit %>

<Html>
    <head>
        <TITLE>Information Tech Dept</TITLE>
        <LINK REL="STYLESHEET" HREF="table.css">
    </head>

<Body>
<%
    Dim conn, objRS, Sql
    Set conn = server.createobject("ADODB.connection")
    conn.Mode = 1 ' read only
    conn.connectionString = "DSN=dsnemp"
    conn.open
    Set objRS = server.createobject("ADODB.recordset")
    Sql = "select * from emp"
    objRS.open Sql, conn
%>

<center>
<b>Information Technology Department</b>
<TABLE border=1>
    <TR>
        <TD><b>Employee Number</b></TD>
        <TD><b>Employee Name</b></TD>
        <TD><b>Basic Salary</b></TD>
        <TD><b>Joining Date</b></TD>
    </TR>
<% do while not objRS.EOF %>
    <%= "<TR><TD>" & objRS ("Emp_No") %> </TD>
    <%= "<TD>" & objRS ("Emp_Name") %> </TD>
    <%= "<TD>" & objRS ("Basic_Sal") %> </TD>
    <%= "<TD>" & objRS ("Date_Join") %> </TD></TR>
<%
    objRS.movenext
    Loop
    objRS.close
    conn.close
%>

</body>
</html>
```

OUTPUT

The screenshot shows a Firefox browser window with the title bar "Information Tech Dept". The address bar displays "localhost/practical/database/data.asp". The main content area contains a table titled "Information Technology Department" with the following data:

Employee Number	Employee Name	Basic Salary	Joining Date
1	John	25000	02-01-2007
2	Mac	30000	12-06-2006
3	Robert	30000	02-01-2007
4	Smith	30000	10-10-2008

The status bar at the bottom right shows "EN" and the date "17-04-2014" along with other system icons.

PRACTICAL 27

Write a script which inserts the record into the database

stu_insert.asp

```
<html>
<body>
    <h2>Student Insert Record</h2>
    <form method="Post" action="rec_insert.asp">
        <table>
            <tr>
                <td>Enrollment No</td>
                <td><input type="text" name="enrl" size="20"></td>
            </tr>
            <tr>
                <td>Student Name</td>
                <td><input type="text" name="sname" size="20"></td>
            </tr>
            <tr>
                <td>Contact No</td>
                <td><input type="text" size="20" name="cno"></td>
            </tr>
            <tr>
                <td>Semester</td>
                <td><input type="text" size="20" name="sem"></td>
            </tr>
        </table>
        <input type="submit" name="Submit" value="Submit">
    </body>
</html>
```

OUTPUT

Firefox - http://localhost/practical/database/STU_INSERT.asp

localhost/practical/database/STU_INSERT.asp

Student Insert Record

Enrollment No	116050702025
Student Name	JOHN
Contact No	8866774411
Semester	2

Submit



rec_insert.asp

```
<%
    Dim conn, objRS, Sql
    Set conn = server.createobject("ADODB.connection")
    conn.Mode = 3
    conn.connectionString = "DSN=student"
    conn.open
    Set objRS = Server.CreateObject("ADODB.Recordset")
    objRS.open "Student",conn,,3,adCmdTable

    objRS.AddNew
    objRS("Enrollment_No") = Request("enrl")
    objRS("Student_Name") = Request("sname")
    objRS("Contact_No") = Request("cno")
    objRS("Semester") = Request("sem")
    objRS.Update

%>
<p>
<%
    response.write "record inserted"
%>
</p>
<%
    objRS.Close
    Set objRS = Nothing
    conn.Close
    Set CONN = Nothing
%>
```

PRACTICAL 28

Write a script which update the record into the database

```
<% enr= 5 %>
<% nm= "Smith" %>

<%
    Dim cn
    Dim rs
    Dim sql

    Set cn= Server.CreateObject("ADODB.Connection")
    Set rs= Server.CreateObject("ADODB.Recordset")

    cn.connectionstring = "DSN=student"
    cn.open
    sql = "SELECT * FROM Student WHERE(Enrollment_No=" & enr & ")"
    rs.Open sql,cn, 1, 3

    rs.Fields("Student_Name") = nm
    rs.Update
    response.write "Record Updated"
    rs.Close
    Set rs = Nothing
    cn.Close
    Set cn = Nothing
%>
```

PRACTICAL 29

Write a script which deletes the record from the database

```
<% enr= 4 %>

<%
    Dim cn
    Dim rs
    Dim sql

    Set cn= Server.CreateObject("ADODB.Connection")
    Set rs= Server.CreateObject("ADODB.Recordset")

    cn.connectionstring "DSN=student"
    cn.open

    sql= "DELETE FROM Student WHERE (Enrollment_No = " & enr & ")"

    rs.Open sql, cn
    response.write "Record Deleted"
    cn.Close
    Set cn = Nothing
%>
```

PRACTICAL 30

Write a suitable scripts which executes SQL queries using Command object

```
<%
    Set conn = Server.CreateObject ("ADODB.Connection")
    conn.connectionstring = "DSN=student"
    conn.open
    Set objCmd = Server.CreateObject ("ADODB.Command")
    Set objCmd.CommandText="SELECT * FROM Student"
    objCmd.Execute
    conn.close
%>
```