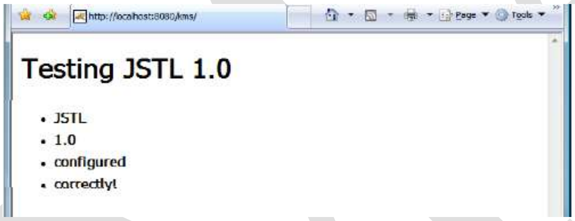
JSP Standard Tag Library

```
<html>
<body>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/fmt" prefix="fmt" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/functions" prefix="fn" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/sql" prefix="sql" %>
<body>
        <%
                String[] messages={"JSTL", "1.0","configured", "correctly!"};
                pageContext.setAttribute("messages", messages);
        %>
        <H1>Testing JSTL 1.0</H1>
                <UL>
                        <c:forEach var="message" items="${messages}">
                                <LI><B><c:out value="${message}"/></B>
                        </c:forEach>
                </UL>
</body>
</html>
```

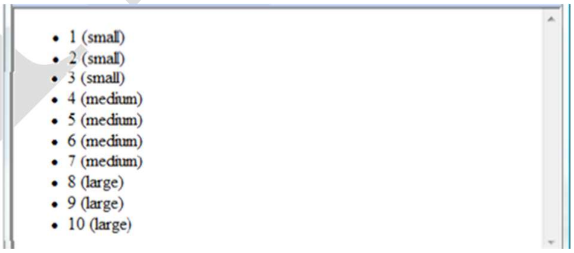


http://localhost:8080/kms/

Testing JSTL 1.0

- JSTL
- 1.0
- configured
- correctly!

```
<c:forEach var="i" begin="1" end="10">
        <LI><c:out value="${i}"/>
        <c:choose>
                <c:when test="${i < 4}">
                        (small)
                </c:when>
                <c:when test="${i < 8}">
                        (medium)
                </c:when>
                <c:otherwise>
                        (large)
                </c:otherwise>
</c:choose>
</c:forEach>
```

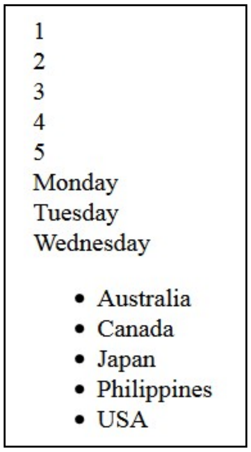


- 1 (small)
- 2 (small)
- 3 (small)
- 4 (medium)
- 5 (medium)
- 6 (medium)
- 7 (medium)
- 8 (large)
- 9 (large)
- 10 (large)

```
<%@ page import="java.util.*"%>
<%@ page import="java.util.Collections"%>
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
   pageEncoding="ISO-8859-1"%>
   <%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/fmt" prefix="fmt" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/functions" prefix="fn" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/sql" prefix="sql" %>
```

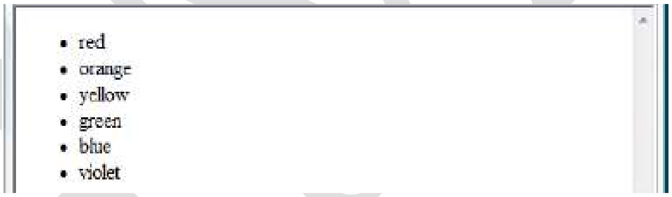
HMA

```
<html>
<head><meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<c:forEach var="i" begin="1" end="5" step="1">
<c:out value="${i}"/> <br/>
</c:forEach>
<%
String arr[]={"Monday","Tuesday","Wednesday"};
Vector V=new Vector();
V.addAll(Arrays.asList(arr));
pageContext.setAttribute("vec", V);
%>
<c:forEach var="day" items="${vec}">
<c:out value="${day}"/> <br/>
</c:forEach>

<UL>
<c:forEach var="country" items="Australia,Canada,Japan,Philippines,USA">
<LI> <c:out value="${country}"/>
</c:forEach>
</UL>
</body>
</html>
```



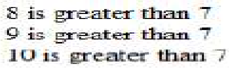
```
1
2
3
4
5
Monday
Tuesday
Wednesday

  • Australia
  • Canada
  • Japan
  • Philippines
  • USA
```

```
<c:forTokens var="color"
items="(red (orange) yellow)(green)((blue) violet)" delims="()">
<LI><c:out value="${color}"/>
</c:forTokens>
```

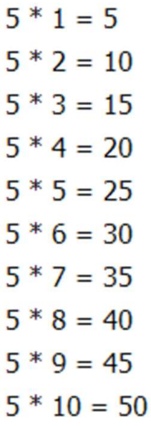


```
• red
• orange
• yellow
• green
• blue
• violet
```

```
<c:forEach var="i" begin="1" end="10">
        <c:if test="${i>7}">
                <c:out value="${i} is greater than 7" /> <br/>
        </c:if>
</c:forEach>
```



```
8 is greater than 7
9 is greater than 7
10 is greater than 7
```



```
5 * 1 = 5
5 * 2 = 10
5 * 3 = 15
5 * 4 = 20
5 * 5 = 25
5 * 6 = 30
5 * 7 = 35
5 * 8 = 40
5 * 9 = 45
5 * 10 = 50
```

```
<html>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/fmt" prefix="fmt" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/functions" prefix="fn" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/sql" prefix="sql" %>
        <c:forEach var="i" begin="1" end="10">
                5
                <c:out value="*"></c:out>
                <c:out value="${i}"></c:out>
                <c:out value="="></c:out>
                <c:out value="${5*i}"></c:out>
                <br/>
        </c:forEach>
</html>
```

HMA

JSP

Examples

E.g.1

```
<web-app>
          <welcome-file-list>
                    <welcome-file>first.jsp</welcome-file>
          </welcome-file-list>
</web-app>
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
   pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<title>Hello</title>
</head>
<body>
<p> Hi, <h3><%="Hello!" %></h3></p>
   <p>You successfully run a simple jsp program.</p>
   <p>Learn More concept about jsp.</p>

</body>
</html>
```

E.g.2

```
<web-app>
          <welcome-file-list>
                    <welcome-file>DateTimeTest.jsp</welcome-file>
                    <welcome-file>JSPEg2.jsp</welcome-file>
                    <welcome-file>TableEg1.jsp</welcome-file>
          </welcome-file-list>
</web-app>
<%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
<!DOCTYPE html >
<html>
<head>
<title>Eg2 </title>
</head>
<body>
          <h2> Hello, World! The current time in milliseconds is <%= System.currentTimeMillis() %> </h2>
</body>
</html>
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"  pageEncoding="ISO-8859-1"%>
<!DOCTYPE html >
<html>
<head>
<title> DateTimeTest </title>
</head>
<body>
Current time: <%= new java.util.Date() %> <br/>
Random number: <%= Math.random() %><br/>
Your hostname: <%= request.getRemoteHost() %><br/>
Your parameter: <%= request.getParameter("yourParameter") %><br/>
Server: <%= application.getServerInfo() %><br/>
Session ID: <%= session.getId() %><br/>
</body>
</html>

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
   pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
```

HMA

```
<html>
<head>
<title>Table</title>
</head>
<body>
<TABLE border="1">
<%
int n=10;
for ( int i = 0; i < n; i++ ) {
%>
<TR>
<TD>Number</TD>
<TD><%= i+1 %></TD>
</TR>
<%
}
%>
</TABLE>
</body>
</html>
```

EXERCISE

errorpage.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
<%@ page isErrorPage="true" %>
<!DOCTYPE html >
<html>
<head>
<title>Guest Book List</title>
</head>
<body>
        <font color="red">
                <%response.reset();%>
                <h2> An SQL Exception occurred while interacting with the guest book database</h2>
                <br/><br/>
                The error message was:<br/>
                The statement was aborted because it would have caused a duplicate key value
                in a unique or primary key constraint defined on GUESTS(EMAIL).
                <br/><br/>
                Please Try again
                <br/><br/>
                <%=exception.toString()%>
                </h2>
        </font>
</body></html>
```

web.xml

```
<web-app>
        <welcome-file-list>
                <welcome-file>GuestBookLogin.jsp</welcome-file>
        </welcome-file-list>
</web-app>
```

GuestBookLogin.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
   pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<title>Guest Book Login</title>
</head>
<body bgcolor="lightgreen">
```

HMA

```
        <form method = "post" action = "guestBookView.jsp">
         <p>Enter your first name, last name and email address to register in our guest book.</p>
           <table>
           <tr>
             <td>First name</td>

             <td>
               <input type="text" name="first" />
             </td>
           </tr>

           <tr>
             <td>Last name</td>

             <td>
               <input type="text" name="last" />
             </td>
           </tr>

           <tr>
             <td>Email</td>
             <td>
               <input type = "text" name = "email" />
             </td>
           </tr>

           <tr>
             <td colspan = "2">
               <input type = "submit" value = "Submit" />
             </td>
           </tr>
         </table>
       </form>
</body>
</html>
```

guestBookView.jsp

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

   <%@ page errorPage = "errorpage.jsp" %>
   <%@ page import = "java.util.*" %>
  <%
  String first=request.getParameter("first");
  String last=request.getParameter("last");
  String email=request.getParameter("email");
  %>
    <html xmlns = "http://www.w3.org/1999/xhtml">

     <head>
       <title>Guest List</title>

     </head>
<body>
      <p style = "font-size: 2em;">Guest List</p>
        <table>
        <thead>
          <tr>
            <th style = "width: 100px;">Last name</th>
            <th style = "width: 100px;">First name</th>
```

HMA

```
        <th style = "width: 200px;">Email</th>
      </tr>
    </thead>
     <tbody>
      <%
                ArrayList<String> guestList = new ArrayList<String>();
     guestList.add(first);
     guestList.add(last);
     guestList.add(email);

                HttpSession s=request.getSession(true);
                ArrayList<ArrayList>list=(ArrayList<ArrayList>)s.getAttribute("list");
                if (list==null)
                list=new ArrayList<ArrayList>();
                int flag=0;
                for(int j=0;j<list.size();j++ )
                {
                            ArrayList<String> g=list.get(j);
                            if(g.get(2).equals(email))
                            {
                                        flag=1;break;
                            }
                }
                if(guestList.get(2).toString().equals(""))
                {flag=1;
                }
                if (flag==0)
                {
                            list.add(guestList);
                }
                else{
     %>
     <p><font color='red'><i>Invalid Email</i></font></p>
     <%
                }
                s.setAttribute("list",list);
                System.out.println("list size:"+list.size());
                for(int j=0;j<list.size();j++)
                {ArrayList<String> g=list.get(j);
    %>
     <tr>
                            <%
                             for(int i=0;i<g.size();i++)
                            {
                            %>
                            <td><%=g.get(i)%></td>
                            <%
                            }
                             %>
                </tr>
     <%
                 }
     %>
    </tbody>
  </table>
 </body>
</html>
```

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