```
1. Wap to demonstrate Hello World in JSP using scriptlets.
   <html>
   <body>
   <marquee>
   <%
          out.println("Hello World");
   %>
   </marquee>
   </body>
   </html>
2. Wap to demonstrate declaration and expression elements.
   <html>
   <body>
   <\%!int a=5,b=2;%>
   <%out.println("A="+a+"\nB="+b);%>
   <br/>br/><b>Addition is:<%=a+b%></b>
   </body>
   </html>
3. Wap to print Date and use page directive.
   <%@page import="java.util.*"%>
   <html>
   <body>
   <%!Date d=new Date();%>
   <%=d%>
   <%--<%Date d=new Date();
          out.println(d);
   %>--%>
   </body>
   </html>
4. Wap to demonstrate action elements jsp:forward and jsp:include.
   <html>
   <body>
   <h1>
   <jsp:forward page="date.jsp"/>
   <!--<jsp:include page="date.jsp"/>-->
   </h1>
   </body>
   </html>
5. Wap to put applet plugin in your jsp page.
   Create an applet.
   import java.awt.*;
   import java.applet.*;
   /*<applet code=Demo width=300 height=300></applet>*/
   public class Demo extends Applet {
          public void paint(Graphics g)
                 g.drawString("Hello World",50,150);
   }
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<html>
   <body>
   <jsp:plugin type="applet" code="Demo"/>
   </body>
   </html>
6. Wap to demonstrate expression language.
   ${10+2}
7. Wap to demonstrate Form with jsp.
   add.html
   <html>
   <body>
   <form name="f1" action="add.jsp">
   Enter a:<input type="text" name="t1"/><br/>
   Enter b:<input type="text" name="t2"/><br/>
   <input type="submit"/>
   </form>
   </body>
   </html>
   Add.jsp
   <html>
   <body>
   <h1>
   <%
          int a=Integer.parseInt(request.getParameter("t1"));
          int b=Integer.parseInt(request.getParameter("t2"));
          out.println("Addition is:"+(a+b));
   %>
   </h1>
   </body>
   </html>
8. Wap to demonstrate Session.
   Login.html
   <html>
   <body>
   <form name="login" action="login.jsp" method="post">
   Username:<input type="text" name="unm"/><br/>
   Password:<input type="password" name="pwd"/><br/>
   <input type="submit"/>
   </form>
   </body>
   </html>
   Login.jsp
   <html>
   <body>
   <%!String str=new String();%>
          HttpSession ses=request.getSession(true);
          str=request.getParameter("unm");
          ses.setAttribute("user",str);
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response.sendRedirect("chk login.jsp");
   %>
   </body>
   </html>
   Chk_login.jsp
   <html>
   <body>
   <h3><%=session.getAttribute("user")%></h3>
          if(session.getAttribute("user").equals("admin"))
                 out.println("<h2>Welcome,"+session.getAttribute("user")+"</h2>");
          }
          else
                 out.println("Login Denied");
   %>
   </body>
   </html>
9. Wap to demonstrate cookie.
   Cookie.html
   <html>
   <body>
   <form name="f1" action="setcookie.jsp">
   Enter your name:<input type="text" name="t1"/><br/>
   <input type="submit"/>
   </form>
   </body>
   </html>
   Setcookie.jsp
   <html>
   <body>
   <%
          String str=request.getParameter("t1");
          Cookie cookie=new Cookie("nm",str);
          response.addCookie(cookie);
   %>
   </body>
   <a href="showcookie.jsp">Show Cookie Value</a>
   </html>
   Showcookie.jsp
   <%
          String ck="nm";
          Cookie cookies[]=request.getCookies();
          Cookie cookie=null;
          if(cookies!=null)
                 for(int i=0;i<cookies.length;i++)
                        if(cookies[i].getName().equals(ck))
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cookie=cookies[i];
                               break;
                        }
                 }
   %>
   <h3>Welcome,<%=cookie.getValue()%></h3>
10. Wap to demonstrate error handling using error page.
   errorHand.html
   <html>
   <body>
   <form name="div" action="errorHand.jsp">
   Enter a:<input type="text" name="t1"/><br/>
   Enter b:<input type="text" name="t2"/><br/>
   <input type="submit"/>
   </form>
   </body>
   </html>
   errorHand.jsp
   <%@page errorPage="error.jsp"%>
   <html>
   <body>
   <%
          int a,b;
          a=Integer.parseInt(request.getParameter("t1"));
                 b=Integer.parseInt(request.getParameter("t2"));
                 int div=a/b;
   %>
   <%=div%>
   </body>
   </html>
   Error.jsp
   <%@page isErrorPage="true"%>
   <html>
   <body>
   <h3 align="center"><font color="red"><%=exception.toString()%></font></h3>
   </body>
   </html>
11. Wap to demonstrate custom tag using JSTL.
   Step – 1 create package in jsp-examples/WEB-INF/classes.
   package myLib;
   public class MyTag
          public static String upper(String str)
                 return str.toUpperCase();
   Step- 2 Compile it.
   Step – 3 in WEB-INF/ make tlds folder and save the below file with name myTag.tld
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```
<?xml version="1.0" encoding="UTF-8"?>
   <taglib version="2.0" xmlns="http://java.sun.com/xml/ns/j2ee"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:schemaLication="http://java.sun.com/xml/ns/javaee web-jsptaglibrary 2 0.xsd">
   <tlib-version>1.0</tlib-version>
   <short-name>mytag</short-name>
   <uri>/WEB-INF/tlds/mytag</uri>
   <function>
   <name>upper</name>
   <function-class>myLib.MyTag</function-class>
   <function-signature>String upper(java.lang.String)</function-signature>
   </function>
   </taglib>
   Step -4 now create jsp file.
   <%@page pageEncoding="UTF-8"%>
   <%@taglib prefix="my" uri="/WEB-INF/tlds/mytag"%>
   <html>
   <body>
   <h1>${my:upper("hello")}</h1>
   </body>
   </html>
12. Wap to demonstrate database programming.
   Select.jsp
   <%@page import="java.sql.*"%>
   <html>
   <body>
   <%!public Connection con;
         public Statement st;
         public ResultSet rs;
   %>
   <a href='addre.html'>Add Data</a>
   < \%_0
         try{
                Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
                con=DriverManager.getConnection("jdbc:odbc:abc");
                st=con.createStatement();
                rs=st.executeQuery("select *from stud");
                while(rs.next()){
                       String rno=rs.getString(1);
                       String nm=rs.getString(2);
                       String ct=rs.getString(3);
                       out.println(""+rno+""+nm+""+ct+"
   <a href=delete.isp?rno="+rno+">Delete</a>");
                }catch(Exception e){e.printStackTrace();}
   %>
   </body>
   </html>
```

```
Addre.html
<html>
<body>
<form name="f1" action="adddata.jsp">
Enter Roll No:<input type="text" name="rno"/><br/>
Enter Name:<input type="text" name="nm"/><br/>
Enter City:<select name="ct">
<option value="rjt">Rajkot</option>
<option value="blore">B'Lore</option>
<option value="mlore">M'Lore</option>
<option value="Chennai">Chennai
<option value="Masuri">Masuri
<option value="Maisur">Maisur
</select><br/>
<input type="submit"/>
</form>
</body>
</html>
Adddata.jsp
<%@page import="java.sql.*"%>
<html>
<body>
<%!public Connection con;
      public Statement st;
      public ResultSet rs;
%>
< \frac{0}{0}
      try{
             Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
             con=DriverManager.getConnection("jdbc:odbc:abc");
             st=con.createStatement();
             String rno=request.getParameter("rno"):
             String nm=request.getParameter("nm");
             String ct=request.getParameter("ct");
             String str="insert into stud values("+rno+",""+nm+"",""+ct+"")";
             int res=st.executeUpdate(str);
             if(res>0)
                   response.sendRedirect("select.jsp");
             else
                   out.println("Opps!!! Can't Insert Data");
             }catch(Exception e){e.printStackTrace();}
%>
</body>
</html>
Delete.jsp
<%@page import="java.sql.*"%>
<html>
<body>
<%!public Connection con;
      public Statement st;
      public ResultSet rs;
```

```
%>
<%
       try{
              Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
              con=DriverManager.getConnection("jdbc:odbc:abc");
              st=con.createStatement();
              String rno=request.getParameter("rno");
              String str="delete from stud where rno="+rno;
              int res=st.executeUpdate(str);
              if(res>0)
                     response.sendRedirect("select.jsp");
              else
                     out.println("Opps!!! Can't Delete Data");
              }catch(Exception e){e.printStackTrace();}
%>
</body>
</html>
```