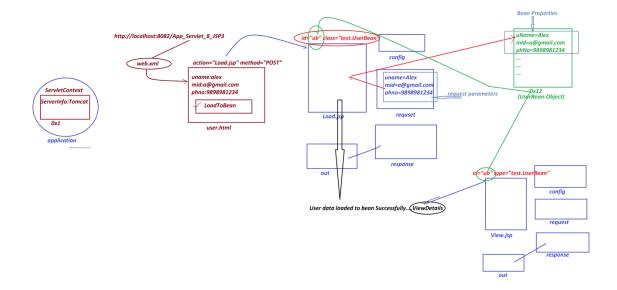
```
Dt: 27/2/2025
(d)<jsp:useBean>
(e)<jsp:setProperty>
(f)<jsp:getProperty>
(d)<jsp:useBean>:
 =><jsp:useBean> is used to instantiate bean object or access the existing
  bean object.
syntax:
 <jsp:useBean id="ub" class="test.UserBean" scope="session"/</pre>
 <jsp:useBean id="ub" type="test.UserBean"></jsp:useBean>
(e)<jsp:setProperty>:
  =><jsp:setProperty> is used to load the data to bean Object.
  syntax:
  <jsp:useBean property="pro-name" param="para-name" name="bean-name">
(f)<jsp:getProperty>:
  =><jsp:getProperty> is used to get the data from bean Object.
  syntax:
  =><jsp:getProperty property="pro-name" name="bean-name">
Ex:(Demonstrating < jsp:useBean>, < jsp:setProperty> and < jsp:getProperty>)
Layout:
```



<!DOCTYPE html> <html> <head> <meta charset="ISO-8859-1"> <title>Insert title here</title> </head> <body> <form action="Load.jsp" method="post"> UserName:<input type="text" name="uname">
 MailId:<input type="text" name="mid">
 PhoneNO:<input type="text" name="phno">
 <input type="submit" value="LoadToBean"> </form> </body> </html> web.xml <?xml version="1.0" encoding="UTF-8"?> <web-app> <welcome-file-list>

<welcome-file>user.html</welcome-file>

user.html

```
</welcome-file-list>
</web-app>
UserBean.java
package test;
import java.io.*;
@SuppressWarnings("serial")
public class UserBean implements Serializable
{
    private String uName,mId;
    private Long phNo;
    public UserBean() {}
      public String getuName() {
            return uName;
      }
      public void setuName(String uName) {
            this.uName = uName;
      public String getmId() {
            return mId;
      }
      public void setmId(String mId) {
            this.mId = mId;
      public long getPhNo() {
            return phNo;
      public void setPhNo(long phNo) {
            this.phNo = phNo;
      }
}
Load.jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
    pageEncoding="ISO-8859-1"
    import="test.UserBean"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<jsp:useBean id="ub" class="test.UserBean" scope="session"/>
<jsp:setProperty property="uName" param="uname" name="ub"/>
```

```
<jsp:setProperty property="mId" param="mid" name="ub"/>
<jsp:setProperty property="phNo" param="phno" name="ub"/>
out.println("User data loaded to bean Successfully....");
%>
<a href="View.jsp">ViewDetails</a>
</body>
</html>
View.jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
    pageEncoding="ISO-8859-1"
    import="test.UserBean"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<jsp:useBean id="ub" type="test.UserBean" scope="session"/>
UserName:<jsp:getProperty property="uName" name="ub"/><br>
MailId:<jsp:getProperty property="mId" name="ub"/><br>
PhoneNo:<jsp:getProperty property="phNo" name="ub"/>
</body>
</html>
*imp
Expression Language(EL):
=>Expression Language(EL) introduced into JSP to make the code more
 simple and can access all the implicit objects of JSP.
syntax:
$(Expression)
=>The following are the implicit objects of EL:
  1.applicationScope
```

2.sessic	onScope
3.reque	estScope
4.pages	Scope
5.parar	n
6.parar	mValues
7.head	er
8.head	erValues
9.cooki	re e
10.initP	aram
11.page	eContext
1.applicat =>applic	cionScope: cationScope is used to access the attribute from ServletContext.
2.sessionS	Gcope:
=>sessio	nScope is used to access the attribute from HttpSession.
3.requestS	Scope:
=>reque	estScope is used to access the attribute from request-object.
4.pageSco	ppe:
=>page	Scope is used to access the attribute from PageContext Object.
5.param:	
=>paran	n is used to access single parameter-value from the request-Object

6.paramValues:
=>paramValues is used to access multiple parameter-values from the request object
7.header:
=>header is used retrive HTTP protocol header name.
8.headerValues:
a.neuder values.
=>headerValues is used retrieve HTTP protocol multiple header names.
9.cookie:
=>cookie is used to get the cookies from request-object.
10.initParam:
=>initParam is used to access the initilization parameter-values from config object.
11.pageContext:
=>pageContext is implicit name used by JSP-EL to access PageContext-object
Summary of Objects Generated from CoreJava:
1.User defined Class Objects
2.String-Objects
3.WrapperClass-Objects
4.Array-Objects
5.Collection <e>-Objects</e>

- 6.Map<K,V>-Objects
- 7.Enum<E>-Objects

Summary of Objects generated from JDBC

- 1.Connection Object
- 2.Statement Object
- 3.PreparedStatement Object
- 4.CallableStatement Object
- 5.ResultSet Object
 - (i)Scrollable ResultSet Object
 - (ii)NonScrollable ResultSet Object
- 6.RowSet Object
 - (i)JdbcRowSet Object
 - (ii)CachedRowSet Object
- 7.DatabaseMetaData Object
- 8.ParameterMetaData Object
- 9.ResultSetMetaData Object
- 10.RowSetMetaData Object

Summary of Objects generated from Servlet Programming:

- 1.ServletContext Object
- 2.ServletConfig Object
- 3.ServletRequest/HttpServletRequest Object
- 4.ServletResponse/HttpServletResponse Object
- 5.PrintWriter Object

6.HttpSession Object
7.Cookie Object
8.Bean Object
9.JCF Object
10.DAO Object
Summary of implicit Objects generated from JSP programming:
1.application
2.config
3.request
4.response
5.out
6.session
7.exception
8.page
9.pageContext
JSP-EL:(Implicit Objects)
1.applicationScope
2.sessionScope
3.requestScope
4.pageScope
5.param
6.paramValues
7.header

8.headerValues
9.cookie
10.initParam
11.pageContext
define JSTL?
=>JSTL stands for 'JSP Standard Tag Library' and,which provide some tags
to make code more simple.
=>The following are some important JSTL tags:
1.Core Tags
2.Function Tags
3.Formatting Tags
4.XML Tags
5.SQL Tags
1.Core Tags:
=>The fundamental tags used for writing basic codes are known as CoreTags.
2.Function Tags:
=>The tags which support String functions are known as Function Tags.
3.Formatting Tags:
=>The tags which are used to format the data for persentation are known as
Formatting tags.

4.XML Tags:	
=>The tags which are used to write XML code in JSP are known as XML tags.	
5.SQL Tags:	
=>The tags which are used to write DB related Code in JSP are known as SQL Tags.	
Note:	
=>According to realtime application development using MVC,'SQL-Tags' and 'XML-Tags'	
are deprecated.	
=>"@taglib" directive tag is used to include JSTL libraries into Current Running	
Program.	