

JSP Directive Tags:-

JSP directive tags explain how a JSP page should be translated (servlet) to JSP Engine.

There are 3 types of directives:-

- 1) page directive (<%@ page attributes%>)
- 2) include directive (<%@ include attribute%>)
- 3) taglib directive (<%@ taglib attributes%>)

Page Directive:-

Following are the attributes of page directive:-

1. import
2. contentType
3. extends
4. info
5. buffer
6. language
7. isELIgnored
8. isThreadSafe
9. autoFlush
10. session
11. pageEncoding
12. errorPage
13. isErrorPage

Attribute	Description
import	It is used to import to classes
contentType	It is used to define the content type
extends	It is used to define the parent class to be generated by the JSP Engine
Info	It is used to set JSP page information
Buffer	It is used to set the buffer size in Kb (default value is 8kb)
Language	It is used to specify the programming language used in JSP
isELIgnored	Tells whether JSP should support EL or not
isThreadSafe	Tells Whether current JSP should be ThreadSafe or not
autoFlush	It is used to flush When buffer is full automatically
Session	Tells that whether JSP page participates in HttpSession or not
pageEncoding	It is used to define the character encoding for the JSP page
errorPage	Tells to JSP Engine that if an exception is raised JSP page should be redirected to other pages.
isErrorPage	Tells to JSP Engine that this JSP page whether handles the exception or not.

Include Directive:-

Include directive is used to include the content of other resources that resource can be a html, txt or a jsp.

Following one is the attribute of include directive:-

```
<%@ include file="resourceName" %>
```

JSP Action Tags:-

There two types of Action Tags:-

- 1) Standard Action Tags
- 2) Custom Action Tags

Standard Action Tags:-

JSP Standard Action Tags	Description
jsp:forward	forwards the request and response to another resource.
jsp:include	includes another resource.
jsp:useBean	creates or locates bean object.
jsp:setProperty	sets the value of property in bean object.
jsp:getProperty	prints the value of property of the bean.
jsp:param	sets the parameter value. It is used in forward and include mostly.

<jsp:forward> action Tag:-

jsp:forward action tag is used to forward the request to another resource it may be jsp, html or another resource.

jsp:forward without Parameters:-

```
<jsp:forward page="relativeURL | destinationResource" />
```

jsp:forward with parameters:-

```
<jsp:forward page="relativeURL | destinationResource">  
  <jsp:param name="parametername" value="parametervalue" />  
</jsp:forward>
```

<jsp:include> action tag:-

jsp:include action tag is used to include the content of another resource it may be jsp, html or servlet.

This jsp include action tag includes the resource at request time.

Attribute	Description
page	The relative URL of the page to be included.
flush	The boolean attribute determines whether the included resource has its buffer flushed before it is included.

jsp:include without Parameters:-

```
<jsp:include page="relativeURL | destinationResource" />
```

jsp:include with parameters:-

```
<jsp:include page="relativeURL | destinationResource">  
    <jsp:param name="parametername" value="parametervalue" />  
</jsp:include>
```

Java Bean:-

A Java Bean is a java class that should follow following conventions:

1. It should have a no-arg constructor.
2. It should implement Serializable interface.
3. It should provide methods to set and get the values for the properties, known as getter and setter methods.

⇒ Java bean is a reusable component which means it can be reused for multiple times by setting values to its attributes.

Code Snippet:-

```
public class Employee implement Serializable
{
    private int empNo;
    private String ename;
    private String salary;

    //setters & getter methods
}
```