





































































```
        int sum = num1 + num2;
        num1 =num2;
        num2 = sum;
    }
%>
</body></html>
```

```
3) <html><body>
<% int sum=0;
for (int i = 1; i <=10; i++)
    { sum = sum+i ; }
    out.print("sum =" + sum);
%>
</body></html>
```

## ☛ Check your Progress 2

- 1) Standard actions are tags that affect the runtime behaviour of the JSP. These JSP action tag is used to perform some specific tasks such as insert a file dynamically, reuse external JavaBean components, forward the request to the other page and generate HTML for Java Applet Plugin.
- 2) JSP provides different scope for sharing data between web pages. These are:
  - ... Page - 'page' scope means the JSP object can be accessed only from within the same page where it is created. By default, it is page. JSP implicit objects out, exception, response, pageContext, config and page have 'page' scope.
  - ... Request – Beans with request scope are accessible only within pages processing the same request that the object was created in. Objects that have request scope are most often used when you need to share information between resources that is pertinent for the current request only. Only Implicit object request has the 'request' scope.
  - ... Session – This object is accessible from any JSP within the same session. Implicit object session has the 'session' scope.
  - ... Application - This object is accessible from any JSP within the same web application. Implicit object application has the 'application' scope.
- 3) It is used for getting initialization parameters and for sharing the attributes and their values across the entire JSP application. For example, `<%=application.getServerInfo()%>`, it returns the name and version of the servlet container on which the servlet is running.

## ☛ Check your Progress 3

- 1) The 'Java Server Pages' Standard Tag Library (JSTL) contains a set of tags to simplify the JSP development. JSTL provides tags to control the JSP page behaviour and common tasks such as xml data processing, conditionals execution, iteration and SQL tags.
- 2) A JSP error page is designed to handled runtime errors and display a customized view of the exception. You can include an error page in your application at page or application level. At page level, you can use page directive or standard java mechanism options. At the application level, you can only use an `<error page>` element of the deployment descriptor.



- 3) This file is an xml file whose root element is `<web-app>`. It is reside in the web applications under the `WEB-INF/` directory. You can configure JSP tag libraries, welcome files, customizing HTTP error code or exception type. You can use the `<error-page>` element in the deployment descriptor to specify exception type or HTTP error code and location of the error page. The JSP tag libraries can be defined using the `<tag-lib>` element of the deployment descriptor.

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## 4.12 REFERENCES/FURTHER READINGS

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