**SERVLET and JSP**

Servlet	JSP
Servlet is a java code.	JSP is a HTML based code.
Writing code for servlet is harder than JSP as it is HTML in java.	JSP is easy to code as it is java in HTML.
Servlet plays a controller role in the hasMVC approach.	JSP is the view in the MVC approach for showing output.
Servlet is faster than JSP.	JSP is slower than Servlet because the first step in the hasJSP lifecycle is the translation of JSP to java code and then compile.
Servlet can accept all protocol requests.	JSP only accepts HTTP requests.
In Servlet, we can override the service() method.	In JSP, we cannot override its service() method.
In Servlet by default session management is not enabled, user have to enable it explicitly.	In JSP session management is automatically enabled.
In Servlet we have to implement everything like business logic and presentation logic in just one servlet file.	In JSP business logic is separated from presentation logic by using JavaBeansclient-side.
Modification in Servlet is a time-consumingcompiling task because it includes reloading, recompiling, JavaBeans and restarting the server.	JSP modification is fast, just need to click the refresh button.
It does not have inbuilt implicit objects.	In JSP there are inbuilt implicit objects.
There is no method for running JavaScript on the client side in Servlet.	While running the JavaScript at the client side in JSP, the client-side validation is used.
Packages are to be imported on the top of the program.	Packages can be imported into the JSP program(i.e bottom , middleclient-side, or top)

JSP Processing

The following steps explain how the web server creates the Webpage using JSP −

- As with a normal page, your browser sends an HTTP request to the web server.
- The web server recognizes that the HTTP request is for a JSP page and forwards it to a JSP engine. This is done by using the URL or JSP page which ends with **.jsp** instead of **.html**.
- The JSP engine loads the JSP page from disk and converts it into a servlet content. This conversion is very simple in which all template text is converted to println( ) statements and all JSP elements are converted to Java code. This code implements the corresponding dynamic behavior of the page.
- The JSP engine compiles the servlet into an executable class and forwards the original request to a servlet engine.
- A part of the web server called the servlet engine loads the Servlet class and executes it. During execution, the servlet produces an output in HTML format. The output is furthur passed on to the web server by the servlet engine inside an HTTP response.
- The web server forwards the HTTP response to your browser in terms of static HTML content.
- Finally, the web browser handles the dynamically-generated HTML page inside the HTTP response exactly as if it were a static page.

All the above mentioned steps can be seen in the following diagram −
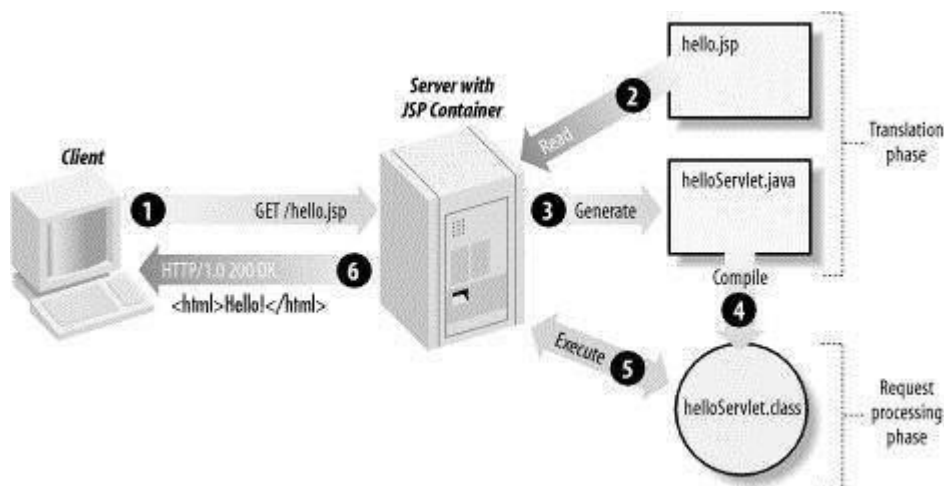
Typically, the JSP engine checks to see whether a servlet for a JSP file already exists and whether the modification date on the JSP is older than the servlet. If the JSP is older than its generated servlet, the JSP container assumes that the JSP hasn't changed and that the generated servlet still matches the JSP's contents. This makes the process more efficient than with the other scripting languages (such as PHP) and therefore faster.

So in a way, a JSP page is really just another way to write a servlet without having to be a Java programming wiz. Except for the translation phase, a JSP page is handled exactly like a regular servlet.