

## 1. Write a program to configure JSP with Eclipse and Creating a Simple JSP Page.

```
// Java program to illustrate creating an array
// of integers, puts some values in the array,
// and prints each value to standard output.

class GFG {
    public static void main(String[] args)
    {
        // declares an Array of integers.
        int[] arr;

        // allocating memory for 5 integers.
        arr = new int[5];

        // initialize the first elements of the array
        arr[0] = 10;

        // initialize the second elements of the array
        arr[1] = 20;

        // so on...
        arr[2] = 30;
        arr[3] = 40;
        arr[4] = 50;

        // accessing the elements of the specified array
        for (int i = 0; i < arr.length; i++)
            System.out.println("Element at index " + i
                               + " : " + arr[i]);
    }
}
```

## 2. Write a program to demonstrate the function of JSP Implicit Objects.

```
<html>
<body>
<%
out.println("Request Method: " + request.getMethod() + "<br>");
out.println("Request URI: " + request.getRequestURI() + "<br>");
out.println("Request Protocol: " + request.getProtocol() + "<br>");
out.println("Remote Address: " + request.getRemoteAddr() + "<br>");
out.println("Remote Host: " + request.getRemoteHost() + "<br>");
out.println("Server Name: " + request.getServerName() + "<br>");
out.println("Server Port: " + request.getServerPort() + "<br>");
out.println("Servlet Path: " + request.getServletPath() + "<br>");
```

```

out.println("Context Path: " + request.getContextPath() + "<br>");
out.println("Path Info: " + request.getPathInfo() + "<br>");
out.println("Query String: " + request.getQueryString() + "<br>");
out.println("Session ID: " + session.getId() + "<br>");
out.println("Session Creation Time: " + session.getCreationTime() +
"<br>");
out.println("Session Last Accessed Time: " + session.getLastAccessedTime()
+ "<br>");
out.println("Application Name: " + application.getServletContextName() +
"<br>");
out.println("Application Server Info: " + application.getServerInfo() +
"<br>");
out.println("Application Major Version: " + application.getMajorVersion() +
"<br>");
out.println("Application Minor Version: " + application.getMinorVersion() +
"<br>");
%>
</body>
</html>

```

### 3. Write a program to demonstrate the use of JSP Directives.

```

<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Page Directive Example</title>
</head>
<body>
<%
    String name = "John";
    int age = 25;
%>
<h1>Page Directive Example</h1>
<p>Name: <%= name %></p>
<p>Age: <%= age %></p>
</body>
</html>

```

### 4 . Write a program to demonstrate the use of JSP action tags.

```

<%@ page contentType="text/html; charset=UTF-8" language="java" %>
<html>
<head>
    <title>JSP Action Tags Example</title>
</head>
<body>

```

```

    <h1>JSP Action Tags Example</h1>
    <p>The following code snippet demonstrates the use of jsp:forward
action tag:</p>
    <jsp:forward page="nextPage.jsp" />
    <p>The following code snippet demonstrates the use of jsp:include
action tag:</p>
    <jsp:include page="includedPage.jsp" />
    <p>The following code snippet demonstrates the use of jsp:useBean
action tag:</p>
    <jsp:useBean id="myBean" class="com.example.MyBean" scope="session" />
    <p>The following code snippet demonstrates the use of jsp:setProperty
action tag:</p>
    <jsp:setProperty name="myBean" property="myProperty" value="myValue" />
    <p>The following code snippet demonstrates the use of jsp:getProperty
action tag:</p>
    <jsp:getProperty name="myBean" property="myProperty" />
</body>
</html>

```

## 5 . Write a program to demonstrate session handling in JSP.

```

<%@ page contentType="text/html; charset=UTF-8" language="java" %>
<html>
<head>
    <title>JSP Action Tags Example</title>
</head>
<body>
    <h1>JSP Action Tags Example</h1>
    <p>The following code snippet demonstrates the use of jsp:forward
action tag:</p>
    <jsp:forward page="nextPage.jsp" />
    <p>The following code snippet demonstrates the use of jsp:include
action tag:</p>
    <jsp:include page="includedPage.jsp" />
    <p>The following code snippet demonstrates the use of jsp:useBean
action tag:</p>
    <jsp:useBean id="myBean" class="com.example.MyBean" scope="session" />
    <p>The following code snippet demonstrates the use of jsp:setProperty
action tag:</p>
    <jsp:setProperty name="myBean" property="myProperty" value="myValue" />
    <p>The following code snippet demonstrates the use of jsp:getProperty
action tag:</p>
    <jsp:getProperty name="myBean" property="myProperty" />
</body>
</html>

```