Basic servlet

```java
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

public class HelloWorld extends HttpServlet {


  private String message;
  @Override
  public void init() throws ServletException {
        message = "Java Servlet Hello World";
  }

  protected void processRequest(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
      /* TODO output your page here. You may use following sample code. */
      //out.println("<!DOCTYPE html>");
      // out.println("<html>");
      // out.println("<head>");
      // out.println("<title>Servlet HelloWorld</title>");
      // out.println("</head>");
      // out.println("<body>");
      out.println("<h1>"+message+"<h1>");//Servlet HelloWorld at " + request.getContextPath() +
"</h1>");
      // out.println("</body>");
      // out.println("</html>");
    }
  }


}
```

Servlet forms (html and servlet)

Index.html

```html
<!DOCTYPE html>
<!--
To change this license header, choose License Headers in Project Properties.
To change this template file, choose Tools | Templates
and open the template in the editor.
-->
<html>
   <head>
      <title>TODO supply a title</title>
      <meta charset="UTF-8">
      <meta name="viewport" content="width=device-width, initial-scale=1.0">
   </head>
   <body>
   <form action="HelloForm" method="post">
     Book name<input type="text" name="firstname" />
     Author name<input type="text" name="lastname" />
     <input type="submit" value="Display">
   </form>
   </body>
</html>
```

Servlet code

```java
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

public class HelloForm extends HttpServlet {

  protected void processRequest(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
       /* TODO output your page here. You may use following sample code. */



      out.println(
       "<html>\n" +
         "<head><title>" + "title" + "</title></head>\n" +
         "<body bgcolor = \"#f0f0f0\">\n" +
           "<h1 align = \"center\">" + "title" + "</h1>\n" +
            "<ul>\n" +
```

```
                " <li><b>First Name</b>: "
                + request.getParameter("firstname") + "\n" +
                " <li><b>Last Name</b>: "
                + request.getParameter("lastname") + "\n" +
              "</ul>\n" +
            "</body>"+
          "</html>"


          );



        }
      }
}
```

Simple select query servlet DB code

```java
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

public class BookDB extends HttpServlet {

    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        try (PrintWriter out = response.getWriter()) {
            /* TODO output your page here. You may use following sample code. */
            String connectionURL = "jdbc:derby://localhost:1527/newIWP";
try {
    Connection conn = DriverManager.getConnection(connectionURL, "arun", "arun");
    out.println("Connect successfully ! ");
    String sql = "SELECT * FROM BOOK";
    Statement st = conn.createStatement();
    ResultSet rs=null;
    rs=st.executeQuery(sql);
            while(rs.next()){
                    out.println(rs.getString("AUTHORNAME"));
```

```
          out.println(rs.getInt("ISSN"));
          out.println(rs.getString("TITLE"));
             }
rs.close(); st.close();  conn.close();
} catch (SQLException ex) {
          out.println("Connect failed ! ");
}
      }
   }
}
```

Simple insert query from html form through servlet DB code

Html

```
<!DOCTYPE html>
<!--
To change this license header, choose License Headers in Project Properties.
To change this template file, choose Tools | Templates
and open the template in the editor.
-->
<html>
   <head>
      <title>TODO supply a title</title>
      <meta charset="UTF-8">
      <meta name="viewport" content="width=device-width, initial-scale=1.0">
   </head>
   <body>
   <form action="HelloForm" method="post">
    Book name<input type="text" name="firstname" />
    Author name<input type="text" name="lastname" />
    <input type="submit" value="add new name">
   </form>
   </body>
</html>
```

servlet

```
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import javax.servlet.ServletException;
```

```java
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;


public class HelloForm extends HttpServlet {

    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
      response.setContentType("text/html;charset=UTF-8");
      try (PrintWriter out = response.getWriter()) {


      /*_____DB Code_____*/

String connectionURL = "jdbc:derby://localhost:1527/newIWP";
try {
   Connection conn = DriverManager.getConnection(connectionURL, "arun", "arun");
 //  out.println("Connect successfully ! ");
   String fn=request.getParameter("firstname");
   String ln=request.getParameter("firstname");

   String sql = "insert into name values (?,?)";
   PreparedStatement ps=conn.prepareStatement(sql);
   ps.setString(1,fn);
   ps.setString(2,ln);
   //ResultSet rs=null;
   ps.executeUpdate();




   String sql1 = "SELECT * FROM name";
   Statement st = conn.createStatement();
   ResultSet rs=null;
   rs=st.executeQuery(sql1);
           while(rs.next()){
                 out.println(rs.getString("firstname"));
           out.println(rs.getString("lastname"));
             }
rs.close(); st.close();  conn.close();
} catch (SQLException ex) {
        out.println("Connect failed ! "+ex);
}

/*_____db code ends_____*/



    }
```

```
    }



}
```