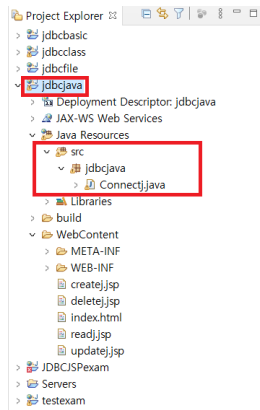
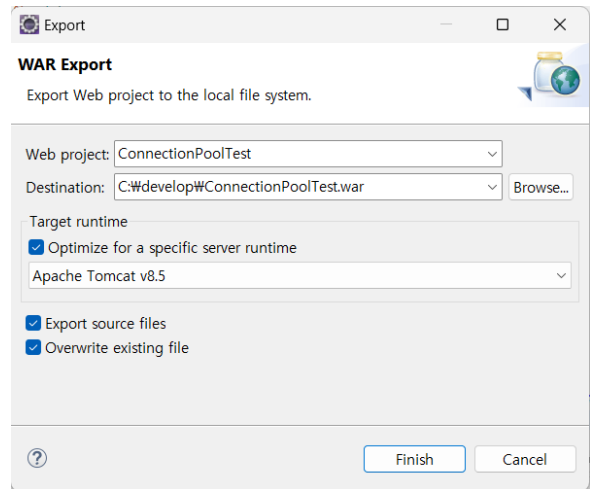


# SQL CLASS 5



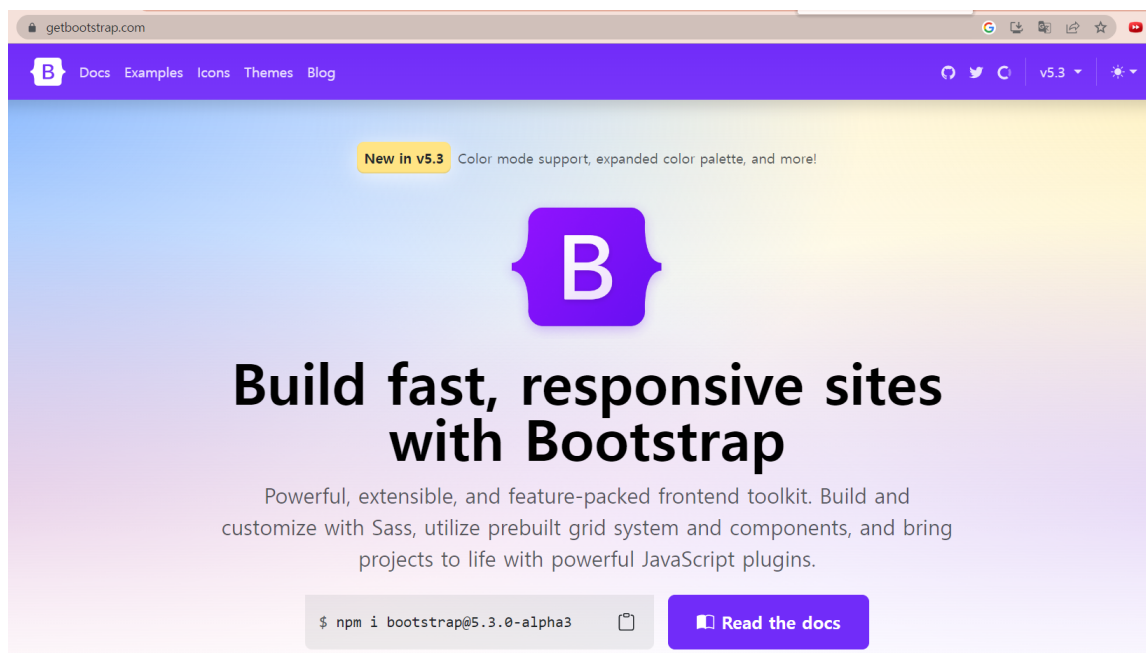
class는 src에서 만들기



백업

## ▼ 부트스트랩 사용

### ▼ 회원가입 페이지



부트스트랩 홈페이지

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**Forms**

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Form control

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Checks & radios

Range

Input group

Floating labels

**Layout**

Validation

**Components**

Accordion

Alerts

Badge

Breadcrumb

More complex layouts can also be created with the grid system.

Email Password

Address

1234 Main St

Address 2

Apartment, studio, or floor

City State Zip

Choose...

☐ Check me out

Sign in

회원가입 페이지 만들기 위해 부트스트랩에서 폼 찾아 코드 끌어오기



## Include via CDN

When you only need to include Bootstrap's compiled CSS or JS, you can use [jsDelivr](#). See it in action with our simple [quick start](#), or [browse the examples](#) to jumpstart your next project. You can also choose to include Popper and our JS [separately](#).

모양 설정

```
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha3/dis
```

동작 설정

```
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha3/di
```

폼이 예쁘게 나오지 않으면 링크를 갖다붙이면 그대로 나옴 (이클립스에서는 구현 제대로 x)

← → ↻ http://localhost:8080/jdbcjava/join.jsp

회원가입

Email Password

Address

1234 Main St

Address 2

Apartment, studio, or floor

City State Zip

Choose...

☐ Check me out

Sign in

링크를 크롬에 갖다붙여서 실행시키면 제대로 구현됨

← → ↻ localhost:8080/jdbcjava/join.jsp

회원가입

아이디 비밀번호

대소문자, 특수문자를 이용하여 8자리 이상

주소

시/군/구

전화번호

010-0000-0000

이름 성별 생년월일

여

00-00-00

☐ Check me out

회원 등록

```

<title>Insert title here</title>
</head>
<body>
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha3/dist/css/bootstrap.min.css" rel="stylesheet">
회원가입
<form class="row g-3" action="createj.jsp" method="get">
  <div class="col-md-6">
    <label for="inputEmail4" class="form-label">아이디</label>
    <input type="text" class="form-control" id="inputEmail4">
  </div>
  <div class="col-md-6">
    <label for="inputPassword4" class="form-label">비밀번호</label>
    <input type="password" class="form-control" id="inputPassword4" placeholder="대소문자, 특수문자를 이용하여">
  </div>
  <div class="col-12">
    <label for="inputAddress" class="form-label">주소</label>
    <input type="text" class="form-control" id="inputAddress" placeholder="시/군/구">
  </div>
  <div class="col-12">
    <label for="inputAddress2" class="form-label">전화번호</label>
    <input type="text" class="form-control" id="inputAddress2" placeholder="010-0000-0000">
  </div>
  <div class="col-md-6">
    <label for="inputCity" class="form-label">이름</label>
    <input type="text" class="form-control" id="inputCity">
  </div>
</form>

```

action="createj.jsp" 사용하여 create로 넘어가도록 조작  
method="get"은 동작한 키 값을 링크에 보이도록 함(default), method="post"는 가리도록 함

```

<title>Insert title here</title>
</head>
<body>
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha3/dist/css/bootstrap.min.css" rel="stylesheet">
회원가입
<form class="row g-3" action="createj.jsp" method="get">
  <div class="col-md-6">
    <label for="inputEmail4" class="form-label">아이디</label>
    <input type="text" name="name" class="form-control" id="inputEmail4">
  </div>
  <div class="col-md-6">
    <label for="inputPassword4" class="form-label">비밀번호</label>
    <input type="password" class="form-control" id="inputPassword4" placeholder="대소문자, 특수문자를 이용하여">
  </div>
  <div class="col-12">
    <label for="inputAddress" class="form-label">주소</label>
    <input type="text" class="form-control" id="inputAddress" placeholder="시/군/구">
  </div>
  <div class="col-12">
    <label for="inputAddress2" class="form-label">전화번호</label>
    <input type="text" class="form-control" id="inputAddress2" placeholder="010-0000-0000">
  </div>
  <div class="col-md-6">
    <label for="inputCity" class="form-label">이름</label>
    <input type="text" class="form-control" id="inputCity">
  </div>
</form>

```

name을 입력하면 name=아이디로 create.jsp로 넘어갈 수 있음  
외국은 잘 쓰지 않아서 부트스트랩 이용 시 붙여줘야함

http://localhost:8080/jdbcjava/createj.jsp?id=ehdgnl&pw=ahsckjdfjdf&add=%EB%A7%88%ED%8F%AC%EA%B5%

키값이 들어가는 것을 볼 수 있음

```

<script>
  window.location.href="main.jsp";
</script>

```

```

<header class="site-header sticky-top py-1">
  <nav class="container d-flex flex-column flex-md-row justify-content-between">
    <a class="py-2" href="#" aria-label="Product">
      <svg xmlns="http://www.w3.org/2000/svg" width="24" height="24" fill="none" stroke="currentColo
    </a>
    <a class="py-2 d-none d-md-inline-block" href="#">Tour</a>
    <a class="py-2 d-none d-md-inline-block" href="#">Product</a>
    <a class="py-2 d-none d-md-inline-block" href="#">Features</a>
    <a class="py-2 d-none d-md-inline-block" href="#">Enterprise</a>
    <a class="py-2 d-none d-md-inline-block" href="#">Support</a>
    <a class="py-2 d-none d-md-inline-block" href="#">Pricing</a>
    <a class="py-2 d-none d-md-inline-block" href="#">Cart</a>
  </nav>
</header>

```

헤더 부분 (이름 바꾸기)

## ▼ Connection Pool



데이터베이스 연결 객체를 미리 생성하여 관리

매번 연결 객체를 생성, 닫는 과정에서 발생하는 시간적 비용, 성능 저하를 줄일 수 있음

연결 객체를 사용한 후에는 해당 객체를 반환하여 다른 클라이언트에서 재사용 가능

### ▼ 설정 1/3 STEP

context.xml 생성 ⇒ DB 연결에 필요한 정보들(id, password등) 설정

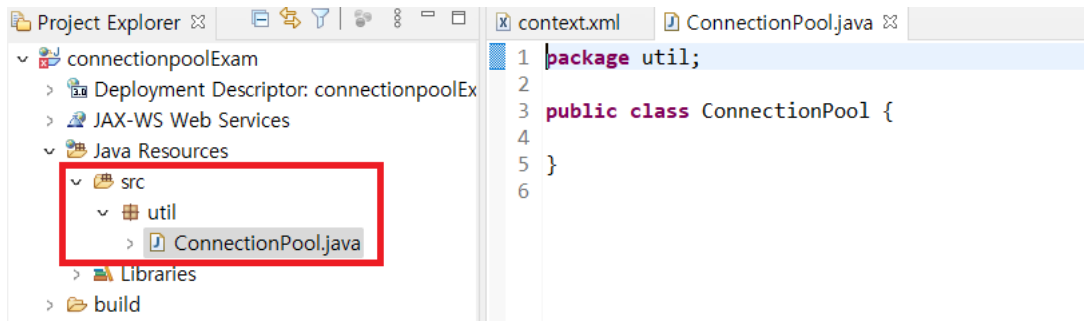
Node	Content
?xml	version="1.0" encoding="UTF-8"

```

<?xml version="1.0" encoding="UTF-8"?>
<Context>  <!-- 꼭 대문자로 -->
  <Resource name="jdbc/class" <!-- DB 이름 설정 *name ="jdbc/DB이름" -->
    auth="Container"
    type="javax.sql.DataSource"
    driverClassName="com.mysql.jdbc.Driver" <!-- maria or oracle로 변경 가능 -->
    url="jdbc:mysql://localhost:3306/class?serverTimezone=UTC"
    <!-- 서버타임 설정, 터질 수도 있어서 가급적 설정-->
    username="root" <!-- DB아이디 설정 -->
    password="0000" <!-- DB비밀번호 설정 -->
    maxTotal="16" <!-- 최대 커넥션 객체 개수 -->
    maxIdle="4" <!-- 기본 객체 유지 개수 -->
    maxWaitMillis="-1" />
  </Resource>
</Context>

```

### ▼ 설정 2/3 STEP



```
package util;

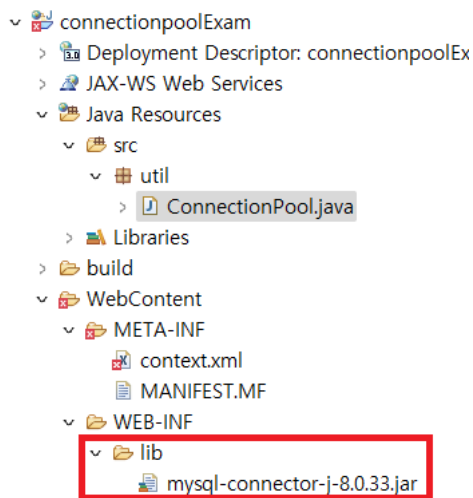
import java.sql.*;
import javax.naming.*;
import javax.sql.DataSource;

public class ConnectionPool {

    private static DataSource _ds = null;

    public static Connection get() throws NamingException, SQLException {
        if(_ds == null) {
            _ds = (DataSource) (new InitialContext()).lookup("java:comp/env/jdbc/class"); // DB명 조심
        }
        return _ds.getConnection();
    }
}
```

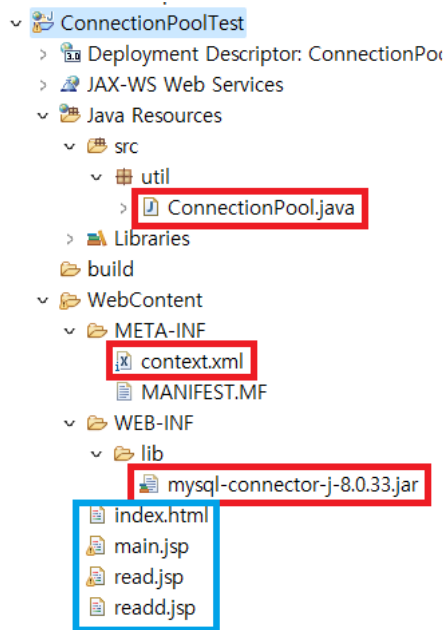
### ▼ 설정 3/3 STEP



library에 connector 넣어주기

### ▼ 페이지 만들기

#### ▼ 설정



이 상태에서 시작, 파란색은 만들어질 페이지

## ▼ 메인 페이지

메인 페이지 디자인은 부트스트랩에서 가져오기

```
<header class="site-header sticky-top py-1">
  <nav class="container d-flex flex-column flex-md-row justify-content-between">
    <a class="py-2" href="main.jsp" aria-label="Product">
      <svg xmlns="http://www.w3.org/2000/svg" width="24" height="24" fill="none" stroke
    </a>
    <a class="py-2 d-none d-md-inline-block" href="read.jsp">목록보기</a>
    <a class="py-2 d-none d-md-inline-block" href="join.jsp">회원가입</a>
    <a class="py-2 d-none d-md-inline-block" href="#">로그인</a>
    <a class="py-2 d-none d-md-inline-block" href="#">정보수정</a>
    <a class="py-2 d-none d-md-inline-block" href="#">정보삭제</a>
    <a class="py-2 d-none d-md-inline-block" href="#">내 정보</a>
```

목록보기에 read.jsp 링크, 회원가입에 join.jsp 링크 (header부분)

```
read.jsp main.jsp header.jsp readd.jsp Product example - Bootstrap v5.3
97 --bs-btn-active-color: var(--bs-btn-hover-color);
98 --bs-btn-active-bg: #5a23c8;
99 --bs-btn-active-border-color: #5a23c8;
100 }
101 .bd-mode-toggle {
102   z-index: 1500;
103 }
104 </style>
105
106
107 <!-- Custom styles for this template -->
108 <link href="product.css" rel="stylesheet">
109 </head>
110 <body>
111
112 <!-- 헤더부분 자를 -->
113 <%@ include file="header.jsp" %>
114
115 <main>
116 <div class="position-relative overflow-hidden p-3 p-md-5 m-md-3 text-center bg-body-tertiary">
117 <div class="col-md-5 p-lg-5 mx-auto my-5">
118 <h1 class="display-4 fw-normal">Punny headline</h1>
119 <p class="Lead fw-normal">And an even wittier subheading to boot. Jumpstart your marketing efforts with this
120 <a class="btn btn-outline-secondary" href="#">Coming soon</a>
121 </div>
122 <div class="product-device shadow-sm d-none d-md-block"></div>
```

이때, 헤더부분은 모든 페이지에 중복 적용되기 때문에 header.jsp 파일을 따로 만들어 include 실행

## ▼ 전체 조회 페이지(READ)

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>

<%@ page import="java.sql.*" %>
<%@ page import="util.*" %>

<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title> READ.jdbcjava</title>
</head>
<body>
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-ENjd04D
```

```
<table class="table table-hover"> <!-- 반복x -->
<thead>
<tr>
<th scope="col">번호</th>      <!-- 테이블 컬럼 -->
<th scope="col">회원아이디</th>
<th scope="col">회원주소</th>
<th scope="col">회원전화번호</th>
<th scope="col">회원성명</th>
<th scope="col">회원성별</th>
<th scope="col">회원생년월일</th>
<th scope="col">회원가입일</th>
</tr>
</thead>
<tbody>

<%

    Connection conn = null;
    conn = ConnectionPool.get();

    String sql = "SELECT * FROM user";
    PreparedStatement pstmt = conn.prepareStatement(sql);
    ResultSet rset = pstmt.executeQuery();

    while(rset.next()){
        String uno = rset.getString("uno");
        String udate = rset.getString("udate");
        String uid = rset.getString("uid");
        String upw = rset.getString("upw");
        String uadd = rset.getString("uadd");
        String uphone = rset.getString("uphone");
        String uname = rset.getString("uname");
        String ugen = rset.getString("ugen");
        String ubirth = rset.getString("ubirth");

%>
<tr>
<th scope="row"><%=uno %></th>
<td><%=uid%></td>      <!-- td에 한 행이 들어감 -->
<td><%=uadd%></td>
<td><%=uphone%></td>
<td><a href="readd.jsp?num=<%=uno%>"><%=uname%></a></td>
<td><%=ugen%></td>
<td><%=ubirth %></td>
<td><%=udate%></td>
</tr>
<%

    }

%>
</tbody>

</table>

<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha3/dist/js/bootstrap.bundle.min.js" integrity="sha384-ENjd04D
```



번호	회원아이디	회원주소	회원전화번호	회원성명	회원성별	회원생년월일	회원가입일
1	아이디	마포구	010-9180-8653	<a href="#">김동회</a>	여	1999-05-13	2023-05-12 10:46:53
2	gildong	강남구	010-7897-7888	<a href="#">홍길동</a>	여	1988-04-15	2023-05-12 10:48:17
3	gildong	강남구	010-7897-7888	<a href="#">홍길동</a>	여	1988-04-15	2023-05-12 10:48:36

전체 조회 결과

## ▼ 상세 조회 페이지(READ)

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<%@ page import="java.sql.*" %>
<%@ page import="util.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>READdetail</title>
</head>
<body>
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha
    384=...>

<%@ include file="header.jsp" %>

<%
    Connection conn = null;
    conn = ConnectionPool.get();
    int num = Integer.parseInt(request.getParameter("num"));

    String sql = "SELECT * FROM user WHERE uno = ?";
    PreparedStatement pstmt = conn.prepareStatement(sql);
    pstmt.setInt(1, num);

    ResultSet rset = pstmt.executeQuery();

    rset.next();

    String uid = rset.getString("uid");
    String upw = rset.getString("upw");
    String uadd = rset.getString("uadd");
    String uphone = rset.getString("uphone");
    String uname = rset.getString("uname");
    String ugen = rset.getString("ugen");
    String ubirth = rset.getString("ubirth");

    %>
<div class="container my-3">
    <table class="table">


    <tbody>
        <tr>
            <th scope="row">아이디</th>
            <td><%=uid %></td>
        </tr>
        <tr>
            <th scope="row">주소</th>
            <td><%=uadd %></td>
        </tr>
        <tr>
            <th scope="row">휴대폰번호</th>
            <td><%=uphone %></td>
        </tr>
        <tr>
            <th scope="row">이름</th>
            <td><%=uname %></td>
        </tr>
        <tr>
            <th scope="row">성별</th>
            <td><%=ugen %></td>
        </tr>
        <tr>
            <th scope="row">생년월일</th>
            <td><%=ubirth %></td>
        </tr>
    </tbody>
</table>
<div class="btn-group" role="group" aria-label="Basic mixed styles example">
    <a href="update.jsp" class="btn btn-danger">수정</a>
    <a href="delete.jsp" class="btn btn-primary">삭제</a>
    <a href="main.jsp" class="btn btn-warning">홈으로</a>
</div>
```

```

</div>

<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha3/dist/js/bootstrap.bundle.min.js" integrity="sha384-ENjd0
</body>
</html>

```


[목록보기](#)
[회원가입](#)
[로그인](#)
[정보수정](#)
[정보삭제](#)
[내 정보](#)

아이디	gildong
주소	강남구
휴대폰번호	010-7897-7888
이름	홍길동
성별	여
생년월일	1988-04-15

수정
삭제
홈으로

## ▼ 회원 가입 페이지(CREATE)

### ▼ JOIN

```

<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>JOIN</title>
</head>
<body>
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="
<%@ include file="header.jsp" %>
회원가입
<form class="row g-3" action="createj.jsp" method="get">
  <div class="col-md-6">
    <label for="inputEmail4" class="form-label">아이디</label>
    <input type="text" name="id" class="form-control" id="inputEmail4">
  </div>
  <div class="col-md-6">
    <label for="inputPassword4" class="form-label">비밀번호</label>
    <input type="password" name="pw" class="form-control" id="inputPassword4" placeholder="대소문자, 특수문자를 이용하여 8자리 0
  </div>
  <div class="col-12">
    <label for="inputAddress" class="form-label">주소</label>
    <input type="text" name="add" class="form-control" id="inputAddress" placeholder="시/군/구">
  </div>
  <div class="col-12">
    <label for="inputAddress2" class="form-label">전화번호</label>
    <input type="text" name="phone" class="form-control" id="inputAddress2" placeholder="010-0000-0000">
  </div>
  <div class="col-md-6">
    <label for="inputCity" class="form-label">이름</label>
    <input type="text" name="name" class="form-control" id="inputCity">
  </div>
  <div class="col-md-4">
    <label for="inputState" class="form-label">성별</label>
    <select id="inputState" name="gen" class="form-select">
      <option selected>여</option>
      <option>남</option>
    </select>
  </div>
  <div class="col-md-2">
    <label for="inputZip" class="form-label">생년월일</label>
    <input type="text" name="birth" class="form-control" id="inputZip" placeholder="00-00-00">
  </div>
  <div class="col-12">
    <button type="submit" class="btn btn-primary">회원 등록</button>
  </div>
</form>

</body>
</html>

```

[목록보기](#)[회원가입](#)[로그인](#)[정보수정](#)[정보삭제](#)[내 정보](#)

## 회원가입

아이디

비밀번호

대소문자, 특수문자를 이용하여 8자리 이상

주소

전화번호

이름

성별

생년월일

[회원 등록](#)

크롬에서 구현한 페이지

### ▼ CREATE

```

<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
    <%@ page import="java.sql.*" %>
    <%@ page import="util.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>CREATE</title>
</head>
<body>
    <%@ include file="header.jsp" %>
    <%
        Connection conn = null;
        conn = ConnectionPool.get();

        String id = request.getParameter("id");
        String pw = request.getParameter("pw");
        String add = request.getParameter("add");
        String phone = request.getParameter("phone");
        String name = request.getParameter("name");
        String gen = request.getParameter("gen");
        String birth = request.getParameter("birth");

        String sql = "INSERT INTO user(uid, upw, uadd, uphone, uname, ugen, ubirth) VALUES (?, ?, ?, ?, ?, ?, ?)";
        PreparedStatement pstmt = conn.prepareStatement(sql);
        pstmt.setString(1, id);
        pstmt.setString(2, pw);
        pstmt.setString(3, add);
        pstmt.setString(4, phone);
        pstmt.setString(5, name);
        pstmt.setString(6, gen);
        pstmt.setString(7, birth);

        pstmt.executeUpdate();

        response.sendRedirect("read.jsp");

    %>
</body>
</html>

```