<meta charset="UTF-8">

```
MySQL) C
INSERT INTO class1(c1name, c1etc)
VALUES('test2','content');
R
SELECT *
FROM class1;
U
UPDATE class1
SET c1name='update1', c1etc='updatecontent'
WHERE c1no=1;
D
                           1 DELETE FROM class1
                            2 WHERE c1no = 1;
#JSP Project ...
С
<@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8"%>
 <%@ page import="java.sql.*" %>
<!DOCTYPE html>
<html>
<head>
```

```
<title>Insert title here</title>
</head>
<body>
<%
try {
```

```
Class.forName("com.mysql.jdbc.Driver");
 out.print("드라이버 로드 성공 !!!<br>");
}catch(ClassNotFoundException err) {
  out.print("드라이버 로드 실패 !!!<br>" + err.getMessage());
}
Connection conn = null;
try {
 conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/class","root","000
 out.print("연결 객체 생성 성공 !!!<br>");
}catch(SQLException err) {
  out.print("연결 객체 생성 실패 !!!<br>" + err.getMessage());
}
 String sql = "CREATE TABLE class2 ("
 + "c1no int(10) AUTO_INCREMENT,"
 + "c1name VARCHAR(50) NULL DEFAULT NULL,"
 + "c1etc VARCHAR(50) NULL DEFAULT NULL ,"
 + "c1date TIMESTAMP NULL DEFAULT NOW(),"
 + "PRIMARY KEY (c1no) USING BTREE"
 + ")";
  PreparedStatement pstmt = conn.prepareStatement(sql);
 out.print("구문 생성 성공 !!!<br>");
 pstmt.executeUpdate();
 out.print("디비 생성 성공 !!!<br>");
 pstmt.close();
 conn.close();
%>
```

```
</body>
</html>

R

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

```
<%@ page import="java.sql.*" %>
<!DOCTYPE html> <html> <head>
<meta charset="UTF-8">
<title>Step 0</title> </head> <body>
<%

try {
```

```
Class.forName("com.mysql.jdbc.Driver");
 out.print("드라이버 로드 성공!!!<br>");
}catch(ClassNotFoundException err){
  out.print("드라이버 로드 실패!!!<br>"+err.getMessage());
Connection conn = null;
try {
  conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/class","root","000
0");
 out.print("연결 객체 생성 성공!!!<br>");
}catch(SQLException err){
  out.print("연결 객체 생성 실패!!<br>"+err.getMessage());
String sql = "CREATE TABLE class7("
    +"c1no INT(10) NOT NULL AUTO_INCREMENT,"
    +"c1name VARCHAR(50),"
    +"c1etc VARCHAR(100),"
    +"c1date TIMESTAMP NULL DEFAULT (now()),"
    +"PRIMARY KEY(c1no))";
PreparedStatement pstmt = conn.prepareStatement(sql);
out.print("구문 생성 성공!!!<br>");
pstmt.executeUpdate();
out.print("디비 생성 성공!!<br>");
pstmt.close();
conn.close();
```

#JSP Database

JDBC-Basic

Basic

CRUD

```
<%@ page language="java" contentType="text/html; charset=UTF-8"</pre>
    pageEncoding="UTF-8"%>
<%@ page import="java.sql.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Create</title>
</head>
<body>
<%
    Class.forName("com.mysql.jdbc.Driver");
    Connection conn = null;
    String hostname = "jdbc:mysql://localhost:3306/class";
    String username = "root";
    String password = "0000";
    conn = DriverManager.getConnection(hostname, username, password);
%>
<%
    String sql = "INSERT INTO class1 (c1name, c1etc) VALUES('temp', 'tempcontent')";
    PreparedStatement pstmt = conn.prepareStatement(sql);
    pstmt.executeUpdate();
%>
</body>
</html>
```

```
String sql = "INSERT INTO class1 (c1name, c1etc) VALUES(?,?)";

PreparedStatement pstmt = conn.prepareStatement(sql);
    pstmt.setString(1,'mmmmm');
    pstmt.setString(2,'mcontent');

pstmt.executeUpdate();

%>
```

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8"%>
<%@ page import="java.sql.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Read1</title>
</head>
<body>
<body>
<%</pre>
```

Class.forName("com.mysql.jdbc.Driver");

```
Connection conn = null;
String hostname = "jdbc:mysql://localhost:3306/class";
String username = "root";
String password = "0000";
conn = DriverManager.getConnection(hostname, username, password);
String sql = "SELECT * FROM class1";
```

```
PreparedStatement pstmt = conn.prepareStatement(sql);
 ResultSet rset = pstmt.executeQuery();
 while(rset.next()) {
   String c1no = rset.getString("c1no");
   String c1name = rset.getString("c1name");
   String c1etc = rset.getString("c1etc");
   String c1date = rset.getString("c1date");
   out.print(c1no);
   out.print(c1name);
   out.print(c1etc);
   out.print(c1date);
 }
%>
</body>
</html>
<@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8"%>
<%@ page import="java.sql.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Read1</title>
</head>
<body>
<%
```

Class.forName("com.mysql.jdbc.Driver");

```
Connection conn = null;

String hostname = "jdbc:mysql://localhost:3306/class";
String username = "root";
String password = "0000";

conn = DriverManager.getConnection(hostname, username, password);
```

```
String sql = "SELECT * FROM class1";
PreparedStatement pstmt = conn.prepareStatement(sql);

ResultSet rset = pstmt.executeQuery();
while(rset.next()) {
   String c1no = rset.getString("c1no");
   String c1name = rset.getString("c1name");
   String c1etc = rset.getString("c1etc");
   String c1date = rset.getString("c1date");
```

```
%>
<%=c1no %> <%=c1name %> <%=c1etc %> <%=c1date %><br>
<%
}
%>
</body>
</html>
```

```
<%@ page language="java" contentType="text/html; charset=UTF-8"</pre>
    pageEncoding="UTF-8"%>
    <%@ page import="java.sql.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>CREATE</title>
</head>
<body>
  Class.forName("com.mysql.jdbc.Driver");
  Connection conn = null;
  String hostname = "jdbc:mysql://localhost:3306/class";
  String username = "root";
  String password = "0000";
  conn = DriverManager.getConnection(hostname, username, password);
  String sql = "UPDATE class1 SET cname = ?, cetc = ? WHERE cno = ?";
```

```
PreparedStatement pstmt = conn.prepareStatement(sql);
    pstmt.setString(1, "김민수");
    pstmt.setString(2, "tset5");
    pstmt.setInt(3, 5);

pstmt.executeUpdate();

pstmt.close();
conn.close();

%>
</body>
</body>
</html>
```

```
<%@ page language="java" contentType="text/html; charset=UTF-8"</pre>
   pageEncoding="UTF-8"%>
    <%@ page import="java.sql.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>CREATE</title>
</head>
<body>
<%
  Class.forName("com.mysql.jdbc.Driver");
  Connection conn = null;
  String hostname = "jdbc:mysql://localhost:3306/class";
  String username = "root";
  String password = "0000";
  conn = DriverManager.getConnection(hostname, username, password);
  String sql = "DELETE FROM class1 WHERE cno = ?";
  PreparedStatement pstmt = conn.prepareStatement(sql);
      pstmt.setInt(1, 5);
  pstmt.executeUpdate();
  pstmt.close();
  conn.close();
%>
</body>
</html>
```

#while 과 for 중...) for 문을 더 많이 쓴다.

#JDBC-File

Basic

CRUD

```
<%@ page language="java" contentType="text/html; charset=UTF-8"</pre>
    pageEncoding="UTF-8"%>
<%@ page import="java.sql.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Create</title>
</head>
<body>
<%@ include file = "dbconnect.inc"%>
<%
    String sql = "INSERT INTO class1 (c1name, c1etc) VALUES('555', '5555')";
    PreparedStatement pstmt = conn.prepareStatement(sql);
    pstmt.executeUpdate();
%>
</body>
</html>
```

CRUD

```
String sql = "SELECT * FROM class1";
PreparedStatement pstmt = conn.prepareStatement(sql);
ResultSet rset = pstmt.executeQuery();

while(rset.next()){
    String clno = rset.getString("clno");
    String clname = rset.getString("clname");
    String cletc = rset.getString("cletc");
    String cldate = rset.getString("cldate");

%>
    <%=clno %> <%=clname %> <%=cletc %> <%=cldate %> <br>
```

```
<%@ page language="java" contentType="text/html; charset=UTF-8"</pre>
    pageEncoding="UTF-8"%>
    <%@ page import="java.sql.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body>
<%@ include file = "dbconnect.inc"%>
<%
String sql = "UPDATE class1 SET c1name=? WHERE c1no = ?";
  PreparedStatement pstmt = conn.prepareStatement(sql);
    pstmt.setString(1,"iron");
    pstmt.setInt(2,3);
  pstmt.executeUpdate();
 %>
</body>
</html>
```

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

```
<%@ page import="java.sql.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body>
<%@ include file = "dbconnect.inc"%>
<%
String sql = "DELETE FROM class1 WHERE c1no = ?";
 PreparedStatement pstmt = conn.prepareStatement(sql);
 pstmt.setInt(1, 8);
 pstmt.executeUpdate();
%>
</body>
</html>
```

JDBC-Class

```
package jdbcclass;
import java.sql.*;
public class dbconnect {
  public static Connection getConnection() throws ClassNotFoundException, SQLException {
    Class.forName("com.mysql.jdbc.Driver");
    Connection conn = null;
```

```
String hostname = "jdbc:mysql://localhost:3306/class";
    String username = "root";
    String password = "0000";
    conn = DriverManager.getConnection(hostname, username, password);
    PreparedStatement pstmt = null;
    return conn;
  }
}
```

```
С
<%@page import="java.sql.DriverManager"%>
<@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8"%>
<%@ page import="java.sql." %>
<%@ page import="jdbcclass." %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Create</title>
</head>
<body>
<%
Connection conn = null;
conn = dbconnect.getConnection();
 String sql = "INSERT INTO class1 (c1name, c1etc) VALUES ('cup', 'drink')";
 PreparedStatement pstmt = conn.prepareStatement(sql);
 pstmt.executeUpdate();
```

```
%>
```

R

</body> </html>

```
<@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8"%>
<%@ page import = "java.sql." %>
<%@ page import = "jdbcclass." %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body>
<%
Connection conn = null;
conn = dbconnect.getConnection();
 String sql = "SELECT * FROM class1";
 PreparedStatement pstmt = conn.prepareStatement(sql);
 ResultSet rset = pstmt.executeQuery();
 while(rset.next()){
   String c1no = rset.getString("c1no");
   String c1name = rset.getString("c1name");
   String c1etc = rset.getString("c1etc");
   String c1date = rset.getString("c1date");
%>
<%= c1no %>
<%= c1name %>
<%= c1etc %>
<%= c1date %> <br>
<%
}
%>
</body>
</html>
```

U

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

```
<%@ page import="java.sql.*" %>
 <%@ page import="jdbcclass.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body>
<%
Connection conn = null;
conn = dbconnect.getConnection();
 String sql = "UPDATE class1 SET c1name=? WHERE c1no = ?";
 PreparedStatement pstmt = conn.prepareStatement(sql);
   pstmt.setString(1, "몰?루");
   pstmt.setInt(2,4);
 pstmt.executeUpdate();
 %>
</body>
</html>
D
<@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8"%>
<%@ page import="java.sql." %>
<%@ page import="jdbcclass." %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
```

```
<title>Update title here</fitle>
</head>
<body>
<%

Connection conn = null;
conn = dbconnect.getConnection();

String sql = "DELETE FROM class1 WHERE c1no = ?";

PreparedStatement pstmt = conn.prepareStatement(sql);
pstmt.setInt(1, 3);
pstmt.executeUpdate();

%>
</body>
</html>

Connection Pool ) 내일
내일은 더 열심히...
```