# sql class day4

## MySQL

Basic







CRUD



CRUD

```
1  SELECT *
2  FROM class1;
```
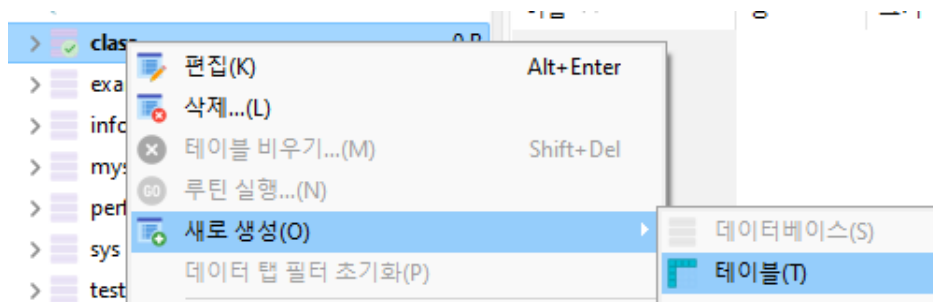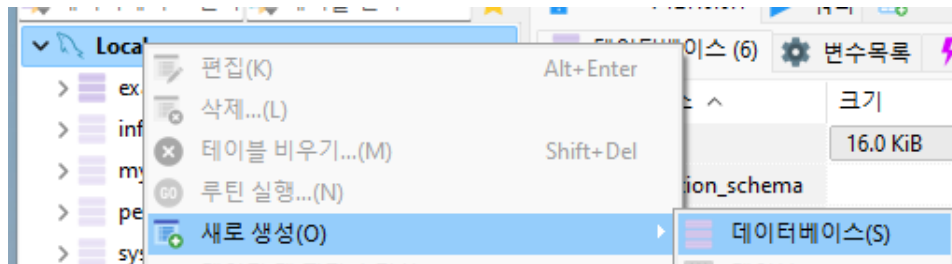
| c1no | c1name | c1etc | c1date |
|---|---|---|---|
| 1 | test1 | test | 2023-05-11 09:41:20 |
| 2 | test2 | fdsa | 2023-05-11 09:41:34 |
| 3 | test2 | content | 2023-05-11 09:48:20 |
| 4 | test2 | content | 2023-05-11 09:48:21 |

class1 (4r × 4c)

C R **U** D

```
1  UPDATE class1
2  SET c1name='update1', c1etc='update content'
3  WHERE c1no = 1;
```

| c1no | c1name | c1etc | c1date |
|---|---|---|---|
| 1 | update1 | update content | 2023-05-11 09:41:20 |
| 2 | test2 | fdsa | 2023-05-11 09:41:34 |
| 3 | test2 | content | 2023-05-11 09:48:20 |
| 4 | test2 | content | 2023-05-11 09:48:21 |

C R U **D**

```
1  DELETE FROM class1
2  WHERE c1no = 1;
```

| c1no | c1name | c1etc |
|---|---|---|
| 1 | update1 | update content |
| 2 | test2 | fdsa |
| 3 | test2 | content |
| 4 | test2 | content |

| c1no | | c1name | c1etc |
|------|---|--------|-------|
| 2 | | test2 | fdsa |
| 3 | | test2 | content |
| 4 | | test2 | content |

# JSP Project

-정하영

▼ 코드

```
<%@ 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>

<%
  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","0000");
    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>
```



- 김주영

```
<%@ 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","0000");
          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();
        %>
```
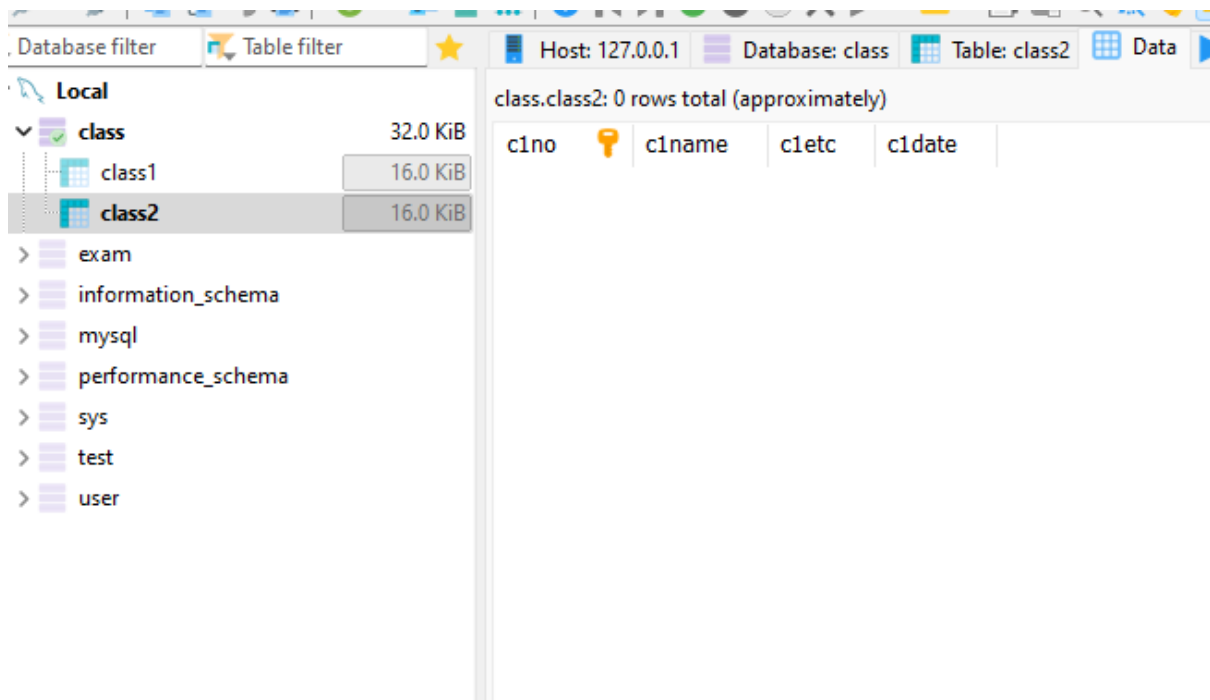
# JSP Database

JDBC - Basic

Basic

## C R U D

```jsp
<%@ 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>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();

%>
```

## C R U D

```
<%@ 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");

    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>
```

## C R U D

```
<%@ 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>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>
</html>
```

## C R U D

```
<%@ 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>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>
```

## JDBC - File

### Basic

### C R U D

```
<%@ 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>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>
```

## C R U D

```
<%@ 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 = "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>
```

## C R U D

```
<%@ 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 = "UPDATE class1 SET c1name=? WHERE c1no = ?";

  PreparedStatement pstmt = conn.prepareStatement(sql);
    pstmt.setString(1,"iron");
    pstmt.setInt(2,3);


  pstmt.executeUpdate();
  %>
</body>
</html>
```

## C R U D

```
<%@ 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

### class

```java
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;
  }

}
```

### C R U D

```jsp
<%@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();

  %>

  </body>
  </html>
```
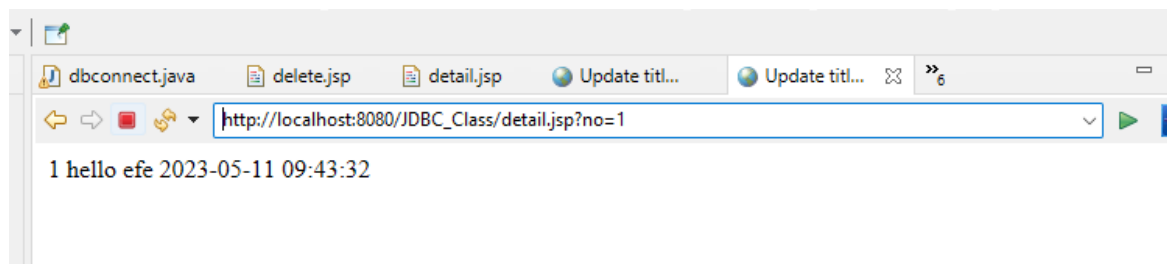
`request.getParameter("no")` 는 요청 파라미터 중 `no` 의 값을 가져오기 때문에

문자열 정수로 변환 `Integer.parseInt()` 하면 ?no=1 이런 거 가능해집니다

```
int no = Integer.parseInt(request.getParameter("no"));
   String sql = "SELECT * FROM class1 WHERE c1no = ?";

   PreparedStatement pstmt = conn.prepareStatement(sql);
      pstmt.setInt(1, no);
```



## C R U 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>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>
```

## C R U 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>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>
```

## C R U D

```jsp
<%@ 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</title>
</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

Basic

C R U D


C R U D


C R U D


C R U D