

JSP- Assignment

Statement

Use this for general-purpose access to your database. Useful when you are using static SQL statements at runtime. The statement interface cannot accept parameters.

Prepared statement

Use this when you plan to use the SQL statement many times. The prepared statement interface accepts input parameters at runtime.

Callable statement

Use this when you want to access the database stored procedure. The callable statement interface can also accept runtime input parameters.

JSP - Assignment

The Statement objects

Creation

```
Statement stmt = null;  
try {  
    stmt = conn.createStatement();  
} catch (SQLException e) {}  
finally {}  
}
```

There are 3 execution methods.

boolean execute(String SQL) :- Returns a boolean value of true if a ResultSet object can be retrieved.

int executeUpdate(String SQL) :- Returns the number of rows affected by the execution of the SQL statement.

ResultSet executeQuery() :- Returns a ResultSet object.

Closing :- You can close by using close() method.

```
Statement stmt = null;  
try {  
    stmt = conn.createStatement();  
} catch (SQLException e) {}  
finally {  
    stmt.close();  
}
```

(Continuation in next book)

The Prepared statement object creation

```
preparedStatement pstmt = null;  
try {
```

String SQL = "Update Employees SET age=? WHERE id=?";

```
PreparedStatement = conn.prepareStatement(SQL);
```

catch (SQLException e) {

9
Finally to

2

closing

```
prepared statement pstmt = null;
```

try to

19. a

```
String SQL = "Update Employees SET age=? WHERE id=?";  
psmt = conn.prepareStatement(SQL);
```

```
psmt = conn.prepareStatement(SQL);
```

9. catch (SQLException e) {

finally 2

```
postmid.close();
```

Teacher's Signature _____

Callable Statement Objects.

Just as a connection object creates the statements and prepared statement objects, it also creates the callable statement object, which would be used to create a call to a database stored procedure.

creation

```
CREATE CREATE OR REPLACE PROCEDURE getEmpName
(EMP_ID IN NUMBER, EMP_FIRST OUT VARCHAR)
BEGIN
    SELECT first INTO EMP_FIRST
    FROM employees
    WHERE ID = EMP_ID;
```

For MySQL

```
DELIMITER $$
DROP PROCEDURE IF EXISTS 'EMP'.getEmpName $$
CREATE PROCEDURE 'EMP'.getEmpName
(IN EMP_ID INT, OUT EMP_FIRST VARCHAR(255))
BEGIN
    SELECT first INTO EMP_FIRST
    FROM employees
    WHERE ID = EMP_ID;
ENDEN $$
DELIMITER;
```