

JDBC Statement :-

The *JDBC Statement*, *CallableStatement*, and *PreparedStatement* interfaces define the methods and properties that enable you to send SQL or PL/SQL commands and receive data from your database.

1. **Interface Statement:-** It is useful when we are using static SQL statements at runtime. The Statement interface cannot accept parameters.
2. **PreparedStatement :-** It is usefull when we plan to use the SQL statements many times. The PreparedStatement interface accepts input parameters at runtime.
3. **CallableStatement :-** It is use when we want to access the database stored procedures. The CallableStatement interface can also accept runtime input parameters.

Structure of Statement Interface:-

```

Connection conn=null;
Statement stmt = null;
try {
Class.forName("");

    stmt = conn.createStatement( );
    . . .
}
catch (SQLException e) {
    . . .
}
finally {
    stmt.close();
}

```

Structure of PreparedStatement Objects:-

```

PreparedStatement pstmt = null;
try {
    String SQL = "Update Employees SET age = ? WHERE id = ?";
    pstmt = conn.prepareStatement(SQL);
    . . .
}
catch (SQLException e) {
    . . .
}
finally {
    pstmt.close();
}

```

Note :- (?) Requires runtime value to update SQL command on database Connection.

CallableStatement Objects:-

We needs to create a procedure in oracle/mysql/sql-server.

Structure :-

Create procedure proc_name

@variable1 datatype,

@variable2 datatype

AS

Begin

//sql command

End

Structure of CallableStatement :-

```
CallableStatement cstmt = null;
try {
    String SQL = "{call proc_name (?, ?)}";
    cstmt = conn.prepareStatement(SQL);
    . . .
}
catch (SQLException e) {
    . . .
}
finally {
    cstmt.close();
}
```

Parameter Passing Methods:-

setInt():- Set Integer type value.

setFloat():- Set Float type value.

setDouble :- Passes the double type value.

setString():- Passes the value of String type.

setLong():- Passes the value of type long.