

NIELIT Gorakhpur

Course Name: A Level (2nd Sem)
Topic: JDBC(Part3)

Subject: JAVA
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JDBC Statement:

java.sql.Statement is an interface. It provides some methods through which we can submit SQL queries to the database. It will be implemented by driver implementation providers. createStatement() method on Connection object will return Statement object. There are 3 types of JDBC statement which are given below:

Statement	PreparedStatement	CallableStatement
It is used to execute normal SQL queries.	It is used to execute parameterized or dynamic SQL queries.	It is used to call the stored procedures.
It is preferred when a particular SQL query is to be executed only once.	It is preferred when a particular query is to be executed multiple times.	It is preferred when the stored procedures are to be executed.
You cannot pass the parameters to SQL query using this interface.	You can pass the parameters to SQL query at run time using this interface.	You can pass 3 types of parameters using this interface. They are – IN, OUT and IN OUT.
This interface is mainly used for DDL statements like CREATE, ALTER, DROP etc.	It is used for any kind of SQL queries which are to be executed multiple times.	It is used to execute stored procedures and functions.
The performance of this interface is very low.	The performance of this interface is better than the Statement interface (when used for multiple execution of same query).	The performance of this interface is high.

Note: In most of the cases the prepared statement is used frequently.

Basic JDBC Examples IN MYsql:

1)To create a Table

```
public class CreateTable {
public static void main(String[] args) {
try {
Class.forName("com.mysql.jdbc.Driver");
Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/test","root","root");
Statement stmt = con.createStatement();
String sql = "create table emp1(name varchar(25),department varchar(5),salary
varchar(25))";

stmt.executeUpdate(sql);
System.out.println("Table is successfully created");
con.close();
}
catch (ClassNotFoundException e)
{
e.printStackTrace();
}
catch (SQLException e)
{
e.printStackTrace();
}
}
}
```

Note: In all JDBC programs, a file called as **mysql.jar(available on net)** needs to be imported in eclipse project, without that a project will not run. But be sure to match your database version with the mysql.jar version. For a reference on how to add mysql.jar I am adding screenshot.

Steps:

Right click on project → build path → configure build path → libraries → classpath → add external jar

