**DRIVERMANAGER CLASS(INTERFACES)**

In Java, the DriverManager class it an interface between the User and the Driver. This class is used to have a watch on driver which is been used for establishing the connection between a database and a driver. The DriverManager class have a list of Driver class which are registered and are called as DriverManager.registerDriver().

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| **S.No.** | **Method** | **Description** |
| 1 | public static void registerDriver(Driver driver) | It is used for Registering the Driver with the Driver Manager. |
| 2 | public static void deregisterDriver(Driver driver) | It is used for Deregistering the Driver with the Driver Manager. |
| 3 | public static Connection getConnection(String Url) | It is used for establishing a connection with the given URL. |
| 4 | public static Connection getConnection(String Url, String username, String password) | It is used for establishing the connection with the given URL, username and password. |

Connection interface

In Java, The Connection interface is used for creating the session between the application and the database. This interface contains Statement, PreparedStatement and DatabaseMetaData. The connection objects are used in Statement and the **DatabaseMetaData. commit(), rollback()** etc.. are some of the methods of Connection Interface.

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| **S.No.** | **Method** | **Description** |
| 1 | public Statement createStatement() | It is used for creating an object of statement for executing the SQL queries. |
| 2 | public Statement createStatement(intresultSetType,intresultSetConcurrency) | It is used for creating objects for the ResultSet from the given type and concurrency. |
| 3 | public void setAutoCommit(boolean status) | It is used for setting the commit status. By default, it is always true. |
| 4 | public void commit() | It is used to save the changes which have been commit or rollback permanent |
| 5 | public void rollback() | It is used to delete the changes which have been commit or rollback permanent |
| 6 | public void close() | It is used to delete the changes which have been commit or rollback permanent |

Statement interface

In Java, The Statement interface is used for executing queries using the database. This interface is a factory of ResultSet. It is used to get the Object of ResultSet. Methods of this interface is given below.

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| **S.No.** | **Method** | **Description** |
| 1 | public ResultSetexecuteQuery(String sql) | It is used for executing the SELECT query |
| 2 | public intexecuteUpdate(String sql) | It is used for executing any specified query |
| 3 | public boolean execute(String sql) | It is used when multiple results are required. |
| 4 | public int[] executeBatch() | It is used for executing the batch of commands. |

ResultSet interface

In Java, the ResultSet Interface is used for maintaining the pointer to a row of a table. In starting the pointer is before the first row. The object can be moved forward as well as backward direction using TYPE\_SCROLL\_INSENSITIVE or TYPE\_SCROLL\_SENSITIVE in createStatement(int,int). Methods of this interface is given below.

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| **S.No.** | **Method** | **Description** |
| 1 | public boolean next() | It is used for moving the cursor to the next position from the current position. |
| 2 | public boolean previous() | It is used for moving the cursor to the previous position from the current position. |
| 3 | public boolean first() | It is used for moving the cursor to the first position from the current position. |
| 4 | public booleanlast() | It is used for moving the cursor to the Last position from the current position. |
| 5 | public booleanabsolute(int row) | It is used for moving the cursor to the specified position from the current position. |
| 6 | public booleanrelative(int row) | It is used for moving the cursor to the relative row number from the current position. |
| 7 | public intgetInt(intcolumnIndex) | It is used to get the data from the specified position. |
| 8 | public intgetInt(String columnName) | It is used to get the data from the specified column name of the current row. |
| 9 | public StringgetString(intcolumnIndex) | It is used to get the data from the specified column name of the current row in form of an integer. |
| 10 | public StringgetString(StringcolumnIndex) | It is used to get the data from the specified column name of the current row in form of string. |

PreparedStatement interface

In Java, The PreparedStatement interface is a subinterface of Statement. It is mainly used for the parameterized queries. A question mark (?) is passed for the values. The values to this question marks will be set by the PreparedStatement. Methods of this interface is given below.

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| **S.No.** | **Method** | **Description** |
| 1 | public void setInt(intparamIndex, int value) | It is used for setting the integer value for the given parameter index. |
| 2 | public void setString(intparamIndex, String value) | It is used for setting the String value for the given parameter index. |
| 3 | public void setFloat(intparamIndex, float value) | It is used for setting the Float value for the given parameter index. |
| 4 | public void setDouble(intparamIndex, double value) | It is used for setting the Double value for the given parameter index. |
| 5 | public intexecuteUpdate() | It is used for executing a query. |
| 6 | public ResultSetexecuteQuery() | It is used for executing the select query. |

ResultSetMetaData Interface

The ResultSetMetaData interface is used to get metadata from the ResultSet object. Metadata are the data about data. Methods of this interface is given below.

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| **S.No.** | **Method** | **Description** |
| 1 | public intgetColumnCount()throws SQLException | It is used to get the total number of columns. |
| 2 | public String getColumnName(int index)throws SQLException | It is used to get the name of the column of a specified column index. |
|  |  |  |
| 3 | public StringgetColumnTypeName(int index)throws SQLException | It is used to get the name of the column of a specified index. |
| 4 | public StringgetTableName(int index)throws SQLException | It is used to get the name of a table from the specified column index |