

**TABLE 10.1** JDBC 3.0 vs. 4.0 drivers

	JDBC <= 3.0 Driver	JDBC >= 4.0 Driver
Required to contain <code>java.sql.Driver</code>	No	Yes
Java will use <code>java.sql.Driver</code> file if present	Yes	Yes
Required to use <code>Class.forName</code>	Yes	No
Allowed to use <code>Class.forName</code>	Yes	Yes

**TABLE 10.2** ResultSet type options

ResultSet Type	Can Go Backward	See Latest Data from Database Table	Supported by Most Drivers
ResultSet.TYPE_FORWARD_ONLY	No	No	Yes
ResultSet.TYPE_SCROLL_INSENSITIVE	Yes	No	Yes
ResultSet.TYPE_SCROLL_SENSITIVE	Yes	Yes	No

**TABLE 10.3** ResultSet concurrency mode options

ResultSet Type	Can Read Data	Can Update Data	Supported by All Drivers
ResultSet.CONCUR_READ_ONLY	Yes	Yes	No
ResultSet.CONCUR_UPDATABLE	Yes	No	Yes

**TABLE 10.4** SQL runnable by execute method

Method	DELETE	INSERT	SELECT	UPDATE
stmt.execute()	Yes	Yes	Yes	Yes
stmt.executeQuery()	No	No	Yes	No
stmt.executeUpdate()	Yes	Yes	No	Yes

**TABLE 10.5** Return types of executes

Method	Return Type	What Is Returned for SELECT	What Is Returned for DELETE/INSERT/UPDATE
stmt.execute()	boolean	true	false
stmt.executeQuery()	ResultSet	The rows and columns returned	n/a
stmt.executeUpdate()	int	n/a	Number of rows added/changed/removed

**TABLE 10.6** ResultSet get methods

Method Name	Return Type	Example Database Type
getBoolean	boolean	BOOLEAN
getDate	java.sql.Date	DATE
getDouble	double	DOUBLE
getInt	int	INTEGER
getLong	long	BIGINT
getObject	Object	Any type
getString	String	CHAR, VARCHAR
getTime	java.sql.Time	TIME
getTimestamp	java.sql.Timestamp	TIMESTAMP

JDBC Type	Java 8 Type	Contains
java.sql.Date	java.time.LocalDate	Date only
java.sql.Time	java.time.LocalTime	Time only
java.sql.Timestamp	java.time.LocalDateTime	Both date and time

**TABLE 10.8** Navigating a ResultSet

Method	Description	Requires Scrollable ResultSet
boolean absolute(int rowNum)	Move cursor to the specified row number	Yes
void afterLast()	Move cursor to a location immediately after the last row	Yes
void beforeFirst()	Move cursor to a location immediately before the first row	Yes
boolean first()	Move cursor to the first row	Yes
boolean last()	Move cursor to the last row	Yes
boolean next()	Move cursor one row forward	No
boolean previous()	Move cursor one row backward	Yes
boolean relative(int rowNum)	Move cursor forward or backward the specified number of rows	Yes