A ResultSet can be of a certain **type.** The type determines some characteristics and abilities of ResultSet.

not all types are supported by all databases and JDBC drivers. you will have to check your database and JDBC driver to see if it supports the type you want to use.

the *DatabaseMetaData.supportResultSetType(int type)* method returns true and false depending on whether the given type it supported or not.

TYPE\_FORWARD\_ONLY

Means that the ResultSet can only be navigated forward. that is, you can only move from row1 -> row2-> row3 etc. you cannot move backwards in ResultSet.

TYPE\_SCROLL\_INSENSITIVE

means that the ResultSet can be navigated /scrolled both forward and backwards. you can also jump to a positon relative to the current position or jump to an absolute position.

the ResultSet is insensitive to changes in the underlying datasoure while the connection is open

that is, if a record in the ResultSet is changed in the database by another thread or process, it will not be reflected in already opened ResultSet of this type.

TYPE\_SCROLL\_SENSITIVE

Means that ResultSet can be navigated both forward and backwards. you can also jump to a position relative to the current position or jump to an absolute position.

the ResultSet is insensitive to changes in the underlying data sources while the connection is open

that is, a record in the ResultSet is changed in the database by another thread of process it will be reflected in the already opened ResultSet office time of this type.

**ResultSet concurrency**

determines whether the ResultSet is updated; but not on databases and JDBC drivers supports this. the method returns true or false depending on whether a given concurrency mode is supported or not.

*DatabaseMetaData.supportsResultSetConcurrency(int concurrency)*

ResultSet can have one of the two concurrency mode

CONCUR\_READ\_ONLY - means that resulted can only be read

CONCUR\_UPDATABLE - means that resulted can both be read and updated

The **ResultSet holdability**

determine if ResultSet is closed when the commit() method of the underlying connection is called.

Not all holdability modes are supported by all database and JDBC drivers.

The *DatabaseMetaData.supportsResultSetHoldability(int holdability)*

return true or false depending on whether the given holdability mode is supported or not.

there are two types of holdability:

ResultSet.CLOSE\_CURSORS\_AT\_COMMIT

it means that ResultSet instances all closed when the connection.commit() method is called on the connection that created the ResultSet.

ResultSet.HOLD\_CURSORS\_OVER\_COMMIT

means that the ResultSet is kept open when the connection.commit() method is called on the connection that created the ResultSet.

also it might be useful if you use ResultSet to update value in the database. you can open a ResultSet, update rows in it and Call connection.commit() and still keep the same ResultSet open for future transactions on the same rows.