| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ResultSetMetaData.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/java/sql/ResultSet.html)   [**NEXT CLASS**](http://docs.google.com/java/sql/RowId.html) | [**FRAMES**](http://docs.google.com/index.html?java/sql/ResultSetMetaData.html)    [**NO FRAMES**](http://docs.google.com/ResultSetMetaData.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | CONSTR | [METHOD](#2et92p0) | DETAIL: [FIELD](#3dy6vkm) | CONSTR | [METHOD](#17dp8vu) |

## **java.sql**

Interface ResultSetMetaData

**All Superinterfaces:** [Wrapper](http://docs.google.com/java/sql/Wrapper.html) **All Known Subinterfaces:** [RowSetMetaData](http://docs.google.com/javax/sql/RowSetMetaData.html) **All Known Implementing Classes:** [RowSetMetaDataImpl](http://docs.google.com/javax/sql/rowset/RowSetMetaDataImpl.html)

public interface **ResultSetMetaData**extends [Wrapper](http://docs.google.com/java/sql/Wrapper.html)

An object that can be used to get information about the types and properties of the columns in a ResultSet object. The following code fragment creates the ResultSet object rs, creates the ResultSetMetaData object rsmd, and uses rsmd to find out how many columns rs has and whether the first column in rs can be used in a WHERE clause.

ResultSet rs = stmt.executeQuery("SELECT a, b, c FROM TABLE2");  
 ResultSetMetaData rsmd = rs.getMetaData();  
 int numberOfColumns = rsmd.getColumnCount();  
 boolean b = rsmd.isSearchable(1);

| **Field Summary** | |
| --- | --- |
| static int | [**columnNoNulls**](http://docs.google.com/java/sql/ResultSetMetaData.html#columnNoNulls)            The constant indicating that a column does not allow NULL values. |
| static int | [**columnNullable**](http://docs.google.com/java/sql/ResultSetMetaData.html#columnNullable)            The constant indicating that a column allows NULL values. |
| static int | [**columnNullableUnknown**](http://docs.google.com/java/sql/ResultSetMetaData.html#columnNullableUnknown)            The constant indicating that the nullability of a column's values is unknown. |

| **Method Summary** | |
| --- | --- |
| [String](http://docs.google.com/java/lang/String.html) | [**getCatalogName**](http://docs.google.com/java/sql/ResultSetMetaData.html#getCatalogName(int))(int column)            Gets the designated column's table's catalog name. |
| [String](http://docs.google.com/java/lang/String.html) | [**getColumnClassName**](http://docs.google.com/java/sql/ResultSetMetaData.html#getColumnClassName(int))(int column)            Returns the fully-qualified name of the Java class whose instances are manufactured if the method ResultSet.getObject is called to retrieve a value from the column. |
| int | [**getColumnCount**](http://docs.google.com/java/sql/ResultSetMetaData.html#getColumnCount())()            Returns the number of columns in this ResultSet object. |
| int | [**getColumnDisplaySize**](http://docs.google.com/java/sql/ResultSetMetaData.html#getColumnDisplaySize(int))(int column)            Indicates the designated column's normal maximum width in characters. |
| [String](http://docs.google.com/java/lang/String.html) | [**getColumnLabel**](http://docs.google.com/java/sql/ResultSetMetaData.html#getColumnLabel(int))(int column)            Gets the designated column's suggested title for use in printouts and displays. |
| [String](http://docs.google.com/java/lang/String.html) | [**getColumnName**](http://docs.google.com/java/sql/ResultSetMetaData.html#getColumnName(int))(int column)            Get the designated column's name. |
| int | [**getColumnType**](http://docs.google.com/java/sql/ResultSetMetaData.html#getColumnType(int))(int column)            Retrieves the designated column's SQL type. |
| [String](http://docs.google.com/java/lang/String.html) | [**getColumnTypeName**](http://docs.google.com/java/sql/ResultSetMetaData.html#getColumnTypeName(int))(int column)            Retrieves the designated column's database-specific type name. |
| int | [**getPrecision**](http://docs.google.com/java/sql/ResultSetMetaData.html#getPrecision(int))(int column)            Get the designated column's specified column size. |
| int | [**getScale**](http://docs.google.com/java/sql/ResultSetMetaData.html#getScale(int))(int column)            Gets the designated column's number of digits to right of the decimal point. |
| [String](http://docs.google.com/java/lang/String.html) | [**getSchemaName**](http://docs.google.com/java/sql/ResultSetMetaData.html#getSchemaName(int))(int column)            Get the designated column's table's schema. |
| [String](http://docs.google.com/java/lang/String.html) | [**getTableName**](http://docs.google.com/java/sql/ResultSetMetaData.html#getTableName(int))(int column)            Gets the designated column's table name. |
| boolean | [**isAutoIncrement**](http://docs.google.com/java/sql/ResultSetMetaData.html#isAutoIncrement(int))(int column)            Indicates whether the designated column is automatically numbered. |
| boolean | [**isCaseSensitive**](http://docs.google.com/java/sql/ResultSetMetaData.html#isCaseSensitive(int))(int column)            Indicates whether a column's case matters. |
| boolean | [**isCurrency**](http://docs.google.com/java/sql/ResultSetMetaData.html#isCurrency(int))(int column)            Indicates whether the designated column is a cash value. |
| boolean | [**isDefinitelyWritable**](http://docs.google.com/java/sql/ResultSetMetaData.html#isDefinitelyWritable(int))(int column)            Indicates whether a write on the designated column will definitely succeed. |
| int | [**isNullable**](http://docs.google.com/java/sql/ResultSetMetaData.html#isNullable(int))(int column)            Indicates the nullability of values in the designated column. |
| boolean | [**isReadOnly**](http://docs.google.com/java/sql/ResultSetMetaData.html#isReadOnly(int))(int column)            Indicates whether the designated column is definitely not writable. |
| boolean | [**isSearchable**](http://docs.google.com/java/sql/ResultSetMetaData.html#isSearchable(int))(int column)            Indicates whether the designated column can be used in a where clause. |
| boolean | [**isSigned**](http://docs.google.com/java/sql/ResultSetMetaData.html#isSigned(int))(int column)            Indicates whether values in the designated column are signed numbers. |
| boolean | [**isWritable**](http://docs.google.com/java/sql/ResultSetMetaData.html#isWritable(int))(int column)            Indicates whether it is possible for a write on the designated column to succeed. |

| **Methods inherited from interface java.sql.**[**Wrapper**](http://docs.google.com/java/sql/Wrapper.html) |
| --- |
| [isWrapperFor](http://docs.google.com/java/sql/Wrapper.html#isWrapperFor(java.lang.Class)), [unwrap](http://docs.google.com/java/sql/Wrapper.html#unwrap(java.lang.Class)) |

| **Field Detail** |
| --- |

### columnNoNulls

static final int **columnNoNulls**

The constant indicating that a column does not allow NULL values.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.sql.ResultSetMetaData.columnNoNulls)

### columnNullable

static final int **columnNullable**

The constant indicating that a column allows NULL values.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.sql.ResultSetMetaData.columnNullable)

### columnNullableUnknown

static final int **columnNullableUnknown**

The constant indicating that the nullability of a column's values is unknown.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.sql.ResultSetMetaData.columnNullableUnknown)

| **Method Detail** |
| --- |

### getColumnCount

int **getColumnCount**()  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Returns the number of columns in this ResultSet object.

**Returns:**the number of columns **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### isAutoIncrement

boolean **isAutoIncrement**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Indicates whether the designated column is automatically numbered.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**true if so; false otherwise **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### isCaseSensitive

boolean **isCaseSensitive**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Indicates whether a column's case matters.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**true if so; false otherwise **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### isSearchable

boolean **isSearchable**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Indicates whether the designated column can be used in a where clause.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**true if so; false otherwise **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### isCurrency

boolean **isCurrency**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Indicates whether the designated column is a cash value.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**true if so; false otherwise **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### isNullable

int **isNullable**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Indicates the nullability of values in the designated column.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**the nullability status of the given column; one of columnNoNulls, columnNullable or columnNullableUnknown **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### isSigned

boolean **isSigned**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Indicates whether values in the designated column are signed numbers.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**true if so; false otherwise **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### getColumnDisplaySize

int **getColumnDisplaySize**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Indicates the designated column's normal maximum width in characters.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**the normal maximum number of characters allowed as the width of the designated column **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### getColumnLabel

[String](http://docs.google.com/java/lang/String.html) **getColumnLabel**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Gets the designated column's suggested title for use in printouts and displays. The suggested title is usually specified by the SQL AS clause. If a SQL AS is not specified, the value returned from getColumnLabel will be the same as the value returned by the getColumnName method.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**the suggested column title **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### getColumnName

[String](http://docs.google.com/java/lang/String.html) **getColumnName**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Get the designated column's name.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**column name **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### getSchemaName

[String](http://docs.google.com/java/lang/String.html) **getSchemaName**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Get the designated column's table's schema.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**schema name or "" if not applicable **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### getPrecision

int **getPrecision**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Get the designated column's specified column size. For numeric data, this is the maximum precision. For character data, this is the length in characters. For datetime datatypes, this is the length in characters of the String representation (assuming the maximum allowed precision of the fractional seconds component). For binary data, this is the length in bytes. For the ROWID datatype, this is the length in bytes. 0 is returned for data types where the column size is not applicable.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**precision **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### getScale

int **getScale**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Gets the designated column's number of digits to right of the decimal point. 0 is returned for data types where the scale is not applicable.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**scale **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### getTableName

[String](http://docs.google.com/java/lang/String.html) **getTableName**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Gets the designated column's table name.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**table name or "" if not applicable **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### getCatalogName

[String](http://docs.google.com/java/lang/String.html) **getCatalogName**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Gets the designated column's table's catalog name.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**the name of the catalog for the table in which the given column appears or "" if not applicable **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### getColumnType

int **getColumnType**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Retrieves the designated column's SQL type.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**SQL type from java.sql.Types **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs**See Also:**[Types](http://docs.google.com/java/sql/Types.html)

### getColumnTypeName

[String](http://docs.google.com/java/lang/String.html) **getColumnTypeName**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Retrieves the designated column's database-specific type name.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**type name used by the database. If the column type is a user-defined type, then a fully-qualified type name is returned. **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### isReadOnly

boolean **isReadOnly**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Indicates whether the designated column is definitely not writable.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**true if so; false otherwise **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### isWritable

boolean **isWritable**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Indicates whether it is possible for a write on the designated column to succeed.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**true if so; false otherwise **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### isDefinitelyWritable

boolean **isDefinitelyWritable**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Indicates whether a write on the designated column will definitely succeed.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**true if so; false otherwise **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs

### getColumnClassName

[String](http://docs.google.com/java/lang/String.html) **getColumnClassName**(int column)  
 throws [SQLException](http://docs.google.com/java/sql/SQLException.html)

Returns the fully-qualified name of the Java class whose instances are manufactured if the method ResultSet.getObject is called to retrieve a value from the column. ResultSet.getObject may return a subclass of the class returned by this method.

**Parameters:**column - the first column is 1, the second is 2, ... **Returns:**the fully-qualified name of the class in the Java programming language that would be used by the method ResultSet.getObject to retrieve the value in the specified column. This is the class name used for custom mapping. **Throws:** [SQLException](http://docs.google.com/java/sql/SQLException.html) - if a database access error occurs**Since:** 1.2

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ResultSetMetaData.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
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For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

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