**Metadata in JDBC**

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| **package** com.company;  **import** com.company.model.Datasourse; **import** java.util.List; **import** com.company.model.SongArtist; **public class** Main {   **public static void** main(String[] args) {  Datasourse d = **new** Datasourse();  **if**(!d.open()) {  System.***out***.println(**"Can't open d"**);  **return**;  }   d.querySongsMetadata();   d.close();  } } | **package** com.company.model; **import** com.company.Artists; **import** java.sql.\*; **import** java.util.ArrayList; **import** java.util.List;  **public class** Datasourse {  **public static final** String ***DB\_NAME*** = **"music.db"**;  **public static final** String ***CONNECTION\_STRING*** = **"jdbc:sqlite:C:\\javadb\\"** + ***DB\_NAME***;  *//column from database comes by a perticular order* **public static final** String ***TABLE\_ALBUMS*** = **"albums"**;  **public static final** String ***COLUMN\_ALBUM\_ID*** = **"\_id"**;  **public static final** String ***COLUMN\_ALBUM\_NAME*** = **"name"**;  **public static final** String ***COLUMN\_ALBUM\_ARTIST*** = **"artist"**;  **public static final int *INDEX\_ALBUM\_ID*** = 1;  **public static final int *INDEX\_ALBUM\_NAME*** = 2;  **public static final int *INDEX\_ALBUM\_ARTIST*** = 3;   **public static final** String ***TABLE\_ARTISTS*** = **"artists"**;  **public static final** String ***COLUMN\_ARTIST\_ID*** = **"\_id"**;  **public static final** String ***COLUMN\_ARTIST\_NAME*** = **"name"**;  **public static final int *INDEX\_ARTIST\_ID*** = 1;  **public static final int *INDEX\_ARTIST\_NAME*** = 2;   **public static final** String ***TABLE\_SONGS*** = **"songs"**;  **public static final** String ***COLUMN\_SONG\_TRACK*** = **"track"**;  **public static final** String ***COLUMN\_SONG\_TITLE*** = **"title"**;  **public static final** String ***COLUMN\_SONG\_ALBUM*** = **"album"**;  **public static final int *INDEX\_SONG\_ID*** = 1;  **public static final int *INDEX\_SONG\_TRACK*** = 2;  **public static final int *INDEX\_SONG\_TITLE*** = 3;  **public static final int *INDEX\_SONG\_ALBUM*** = 4;   **public static final int *ORDER\_BY\_NONE*** = 1;  **public static final int *ORDER\_BY\_ASC*** = 2;  **public static final int *ORDER\_BY\_DESC*** = 3;   **private static** Connection *conn*; *//make it static else you gonna get error* **public boolean** open() {  **try** {  *conn* = DriverManager.*getConnection*(***CONNECTION\_STRING***);  **return true**;  } **catch**(SQLException e) {  System.***out***.println(**"Couldn't connect to database: "** + e.getMessage());  **return false**;  }  }  **public void** close() {  **try** {  **if**(*conn* != **null**) {  *conn*.close();  }  } **catch**(SQLException e) {  System.***out***.println(**"Couldn't close connection: "** + e.getMessage());  }  }  **public void** querySongsMetadata() {  String sql = **"SELECT \* FROM "** + ***TABLE\_SONGS***;   **try** (Statement statement = *conn*.createStatement();  ResultSet results = statement.executeQuery(sql)) {   ResultSetMetaData meta = results.getMetaData();  **int** numColumns = meta.getColumnCount();  **for**(**int** i=1; i<= numColumns; i++) {  System.***out***.format(**"Column %d in the songs table is names %s\n"**,  i, meta.getColumnName(i));  }  } **catch**(SQLException e) {  System.***out***.println(**"Query failed: "** + e.getMessage());  }  } } |