1. Write a program to implement the RowSet. Rather than establishthe connection and create a Statement explicitly the program should uses a JdbcRowSet objectto create a Connection and a Statement automatically.

Output:



**app.JAVA:**

import javax.sql.rowset.JdbcRowSet;  
import javax.sql.rowset.RowSetProvider;  
import java.sql.ResultSetMetaData;  
import java.sql.SQLException;  
  
  
public class app {  
 private static final String *DATABASE\_URL* = "jdbc:mysql://localhost:3306/library";  
 private static final String *USERNAME* = "root";  
 private static final String *PASSWORD* = "";  
  
 public static void main(String[] args) throws ClassNotFoundException {  
 Class.*forName*("com.mysql.cj.jdbc.Driver");  
 try (JdbcRowSet rowSet = RowSetProvider.*newFactory*().createJdbcRowSet()) {  
 rowSet.setUrl(*DATABASE\_URL*);  
 rowSet.setUsername(*USERNAME*);  
 rowSet.setPassword(*PASSWORD*);  
 rowSet.setCommand("SELECT \* FROM Authors");  
 rowSet.execute();  
 ResultSetMetaData metaData = rowSet.getMetaData();  
  
 int numberOfColumns = metaData.getColumnCount();  
 System.*out*.printf("Authors Table of Books Database:%n%n");  
  
 for (int i = 1; i <= numberOfColumns; i++)  
 System.*out*.printf("%-8s\t", metaData.getColumnName(i));  
 System.*out*.println();  
  
 while (rowSet.next()) {  
 for (int i = 1; i <= numberOfColumns; i++)  
 System.*out*.printf("%-8s\t", rowSet.getObject(i));  
 System.*out*.println();  
 }  
 } catch (SQLException sqlException) {  
 sqlException.printStackTrace();  
 System.*exit*(1);  
 }  
 }  
}