

Code

```
1  import java.sql.*;
2
3  public class FirstProg {
4
5      public static void main(String[] args) {
6
7          try (
8
9              Connection conn =
10                 ↪ DriverManager.getConnection("jdbc:mysql://localhost:3306/HW_ebookshop",
11                 ↪ "testuser","password");
12
13                 Statement stmt = conn.createStatement();
14
15             ) {
16                 String strSelect = "SELECT title, price, qty FROM books WHERE qty > 40";
17
18                 System.out.print("The SQL query is: " + strSelect + "\n");
19
20                 ResultSet rset = stmt.executeQuery(strSelect);
21
22                 System.out.println("The records selected are:");
23
24                 int rowCount = 0;
25                 String title;
26                 double price;
27                 int qty;
28
29                 while(rset.next()) {
30                     title = rset.getString("title");
31                     price = rset.getDouble("price");
32                     qty    = rset.getInt("qty");
33                     System.out.println(title + ", " + price + ", " + qty);
34                     rowCount++;
35                 }
36
37                 System.out.println("Total number of records = " + rowCount);
38
39                 conn.close();
40             } catch(SQLException ex) {
41                 ex.printStackTrace();
42             }
43     }
```

Database

MariaDB [HW_ebookshop]> `select * from books;`

```
+-----+-----+-----+-----+-----+
| id    | title                                | author      | price | qty |
+-----+-----+-----+-----+-----+
| 1001  | Java for dummies                    | Tan Ah Teck | 11.11 | 11  |
| 1002  | More Java for dummies               | Tan Ah Teck | 22.22 | 22  |
| 1003  | More Java for more dummies          | Mohammad Ali | 33.33 | 33  |
| 1004  | A Cup of Java                       | Kumar       | 44.44 | 44  |
| 1005  | A Teaspoon of Java                  | Kevin Jones | 55.55 | 55  |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

Output

The SQL query is: `select title, price, qty from books where qty > 40`

The records selected are:

A Cup of Java, 44.44, 44

A Teaspoon of Java, 55.55, 55

Total number of records = 2

Variation

If we replace l. 14 with

```
String strSelect = "SELECT * FROM books";
```

and l. 22–35 with

```
1 ResultSetMetaData rsmd = rset.getMetaData();
2 int columnsNumber = rsmd.getColumnCount();
3 String columnValue;
4 while (rset.next()) {
5     for (int i = 1; i <= columnsNumber; i++) {
6         if (i > 1) System.out.print(", ");
7         columnValue = rset.getString(i);
8         System.out.print(columnValue + " " + rsmd.getColumnName(i));
9     }
10    System.out.println("");
11 }
```

we obtain

```
1001 id,  Java for dummies title,  Tan Ah Teck author,  11.11 price,  11 qty
1002 id,  More Java for dummies title,  Tan Ah Teck author,  22.22 price,  22 qty
1003 id,  More Java for more dummies title,  Mohammad Ali author,  33.33 price,  33 qty
1004 id,  A Cup of Java title,  Kumar author,  44.44 price,  44 qty
1005 id,  A Teaspoon of Java title,  Kevin Jones author,  55.55 price,  55 qty
```