

HW6

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5.12

Please check the attachment "DB-HW7-5.12", it's so hard

5.13

A.

We need to know the number of attributes and names of attributes of r to decide the number and names of columns in the table.

B.

We can use getColumnCount() and getColumnName(int) to get the required information.

C.

```
1  import java.sql.*;
2  public class DB_test {
3
4      static void printTable(String r)
5      {
6          try
7          {
8              Class.forName("oracle.jdbc.driver.OracleDriver");
9              Connection conn =
10 DriverManager.getConnection("jdbc:oracle:thin:@localhost:3006",root,*****);
11              Statement stmt = conn.createStatement();
12              ResultSet rs= stmt.executeQuery(r);
13              ResultSetMetaData rsmd = rs.getMetaData();
14              int count = rsmd.getColumnCount();
15              System.out.print("</tr>");
16              for (int i=0;i<=count;i++)
17              {
18                  System.out.println("<td>" + rs.getString(i) + "</td>");
19              }
20              System.out.println("</tr>");
21              while(rs.next() {
22                  System.out.println("<tr>");
23                  for (int i = 1; i <= count; i++) {
24                      System.out.println("<td>" + rs.getString(i) + "</td>");
25                  }
26                  System.out.println("</tr>");
27              }
28              stmt.close();
29              conn.close();
30          }
31          catch (SQLException | ClassNotFoundException sqle)
32          {
33              System.out.println("SQLException:" + sqle);
34          }
35      }
36  }
```

```

34     }
35 }
36

```

5.14

A.

We need to know the number of attributes and names of attributes of *r* to decide the number and names of columns in the table.

B.

The `SQLNumResultCols(hstmt, &numColumn)` can be used to find the number of columns in a statement, while the `SQLColAttribute()` can be used to find the name, type and other information.

C.

```

1  void printTable(char *r)
2  {
3      try
4      {
5          Class.forName("oracle.jdbc.driver.OracleDriver");
6          Connection conn =
7          DriverManager.getConnection("jdbc:oracle:thin:@localhost:3006",root,*****);
8          Statement stmt = conn.createStatement();
9          ResultSet rs= stmt.executeQuery(r);
10         ResultSetMetaData rsmd = rs.getMetaData();
11         int count = rsmd.getColumnCount();
12         System.out.print("</tr>");
13         for (int i=0;i<=count;i++)
14         {
15             System.out.println("<td>"+rs.getString(i)+"</td>");
16         }
17         System.out.println("</tr>");
18         while(rs.next() {
19             System.out.println("<tr>");
20             for (int i = 1; i <= count; i++) {
21                 System.out.println("<td>" + rs.getString(i) + "</td>");
22             }
23             System.out.println("</tr>");
24         }
25         stmt.close();
26         conn.close();
27     }
28     catch (SQLException | ClassNotFoundException sqle)
29     {
30         System.out.println("SQLException:" + sqle);
31     }
32 }
33

```

