```java
package me.gacl.demo;

import java.io.InputStream;
import java.io.PrintWriter;
import java.lang.reflect.InvocationHandler;
import java.lang.reflect.Method;
import java.lang.reflect.Proxy;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;
import java.util.LinkedList;
import java.util.Properties;
import javax.sql.DataSource;

/**
* @ClassName: JdbcPool
* @Description:编写数据库连接池
* @author: 孤傲苍狼
* @date: 2014-9-30 下午11:07:23
*
*/
public class JdbcPool implements DataSource{

    /**
    * @Field: listConnections
    *          使用LinkedList集合来存放数据库链接，
    *         由于要频繁读写List集合，所以这里使用LinkedList存储数据库连接比较合适
    */
    private static LinkedList<Connection> listConnections = new LinkedList<Connection>();

    static{
        //在静态代码块中加载db.properties数据库配置文件
        InputStream in =
```

```
JdbcPool.class.getClassLoader().getResourceAsStream("db.properties");

 34          Properties prop = new Properties();
 35          try {
 36              prop.load(in);
 37              String driver = prop.getProperty("driver");
 38              String url = prop.getProperty("url");
 39              String username = prop.getProperty("username");
 40              String password = prop.getProperty("password");
 41              //数据库连接池的初始化连接数大小
 42              int jdbcPoolInitSize
=Integer.parseInt(prop.getProperty("jdbcPoolInitSize"));
 43              //加载数据库驱动
 44              Class.forName(driver);
 45              for (int i = 0; i < jdbcPoolInitSize; i++) {
 46                  Connection conn =
DriverManager.getConnection(url, username, password);
 47                  System.out.println("获取到了链接" + conn);
 48                  //将获取到的数据库连接加入到listConnections集合中，
listConnections集合此时就是一个存放了数据库连接的连接池
 49                  listConnections.add(conn);
 50              }
 51
 52          } catch (Exception e) {
 53              throw new ExceptionInInitializerError(e);
 54          }
 55      }
 56
 57      @Override
 58      public PrintWriter getLogWriter() throws SQLException {
 59          // TODO Auto-generated method stub
 60          return null;
 61      }
 62
 63      @Override
```

```
64      public void setLogWriter(PrintWriter out) throws
SQLException {
65          // TODO Auto-generated method stub
66
67      }
68
69      @Override
70      public void setLoginTimeout(int seconds) throws SQLException
{
71          // TODO Auto-generated method stub
72
73      }
74
75      @Override
76      public int getLoginTimeout() throws SQLException {
77          // TODO Auto-generated method stub
78          return 0;
79      }
80
81      @Override
82      public <T> T unwrap(Class<T> iface) throws SQLException {
83          // TODO Auto-generated method stub
84          return null;
85      }
86
87      @Override
88      public boolean isWrapperFor(Class<?> iface) throws
SQLException {
89          // TODO Auto-generated method stub
90          return false;
91      }
92
93      /* 获取数据库连接
94       * @see javax.sql.DataSource#getConnection()
95       */
```

```
 96      @Override
 97      public Connection getConnection() throws SQLException {
 98          //如果数据库连接池中的连接对象的个数大于0
 99          if (listConnections.size()>0) {
100              //从listConnections集合中获取一个数据库连接
101              final Connection conn =
listConnections.removeFirst();
102              System.out.println("listConnections数据库连接池大小是"
+ listConnections.size());
103              //返回Connection对象的代理对象
104              return (Connection)
Proxy.newProxyInstance(JdbcPool.class.getClassLoader(),
conn.getClass().getInterfaces(), new InvocationHandler(){
105                  @Override
106                  public Object invoke(Object proxy, Method
method, Object[] args)
107                          throws Throwable {
108                      if(!method.getName().equals("close")){
109                          return method.invoke(conn, args);
110                      }else{
111                          //如果调用的是Connection对象的close方法，就把
conn还给数据库连接池
112                          listConnections.add(conn);
113                          System.out.println(conn + "被还给
listConnections数据库连接池了！！");
114                          System.out.println("listConnections数据库
连接池大小为" + listConnections.size());
115                          return null;
116                      }
117                  }
118              });
119          }else {
120              throw new RuntimeException("对不起，数据库忙");
121          }
122      }
```

```
123
124     @Override
125     public Connection getConnection(String username, String
password)
126             throws SQLException {
127         return null;
128     }
129 }
```