

```

import java.sql.Connection;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.util.ArrayList;

import java.util.List;


public class DBUtils {

    public static UserAccount findUser(Connection conn, //
                                     String userName, String password) throws SQLException {

        String sql = "Select a.User_Name, a.Password, a.Gender from User_Account a " //
                    + " where a.User_Name = ? and a.password= ?";

        PreparedStatement pstmt = conn.prepareStatement(sql);

        pstmt.setString(1, userName);

        pstmt.setString(2, password);

        ResultSet rs = pstmt.executeQuery();

        if (rs.next()) {

            String gender = rs.getString("Gender");

            UserAccount user = new UserAccount();

            user.setUserName(userName);

            user.setPassword(password);

            user.setGender(gender);

            return user;

        }

        return null;
    }
}

```

```
}
```

```
public static UserAccount findUser(Connection conn, String userName) throws SQLException {
```

```
    String sql = "Select a.User_Name, a.Password, a.Gender from User_Account a "//  
        + " where a.User_Name = ? ";
```

```
    PreparedStatement pstmt = conn.prepareStatement(sql);  
    pstmt.setString(1, userName);
```

```
    ResultSet rs = pstmt.executeQuery();
```

```
    if (rs.next()) {  
        String password = rs.getString("Password");  
        String gender = rs.getString("Gender");  
        UserAccount user = new UserAccount();  
        user.setUserName(userName);  
        user.setPassword(password);  
        user.setGender(gender);  
        return user;  
    }
```

```
    return null;
```

```
}
```

```
public static List<Product> queryProduct(Connection conn) throws SQLException {
```

```
    String sql = "Select a.Code, a.Name, a.Price from Product a ";
```

```
    PreparedStatement pstmt = conn.prepareStatement(sql);
```

```

ResultSet rs = pstmt.executeQuery();

List<Product> list = new ArrayList<Product>();

while (rs.next()) {
    String code = rs.getString("Code");
    String name = rs.getString("Name");
    float price = rs.getFloat("Price");
    Product product = new Product();
    product.setCode(code);
    product.setName(name);
    product.setPrice(price);
    list.add(product);
}

return list;
}

```

```

public static Product findProduct(Connection conn, String code) throws SQLException {
    String sql = "Select a.Code, a.Name, a.Price from Product a where a.Code=?";

    PreparedStatement pstmt = conn.prepareStatement(sql);
    pstmt.setString(1, code);

    ResultSet rs = pstmt.executeQuery();

    while (rs.next()) {
        String name = rs.getString("Name");
        float price = rs.getFloat("Price");
        Product product = new Product(code, name, price);
        return product;
    }
}

```

```
        return null;
    }

    public static void updateProduct(Connection conn, Product product) throws SQLException {
        String sql = "Update Product set Name=?, Price=? where Code=? ";

        PreparedStatement pstmt = conn.prepareStatement(sql);

        pstmt.setString(1, product.getName());
        pstmt.setFloat(2, product.getPrice());
        pstmt.setString(3, product.getCode());
        pstmt.executeUpdate();
    }
```

```
    public static void insertProduct(Connection conn, Product product) throws SQLException {
        String sql = "Insert into Product(Code, Name,Price) values (?, ?, ?)";

        PreparedStatement pstmt = conn.prepareStatement(sql);

        pstmt.setString(1, product.getCode());
        pstmt.setString(2, product.getName());
        pstmt.setFloat(3, product.getPrice());

        pstmt.executeUpdate();
    }
```

```
    public static void deleteProduct(Connection conn, String code) throws SQLException {
        String sql = "Delete From Product where Code= ?";
```

```
        PreparedStatement pstmt = conn.prepareStatement(sql);

        pstmt.setString(1, code);

        pstmt.executeUpdate();
    }

    public static void insertUserAccount(Connection conn, UserAccount user) throws SQLException {
        String sql = "Insert into UserAccount(Username, Gender, Password) values (?, ?, ?)";

        PreparedStatement pstmt = conn.prepareStatement(sql);

        pstmt.setString(1, user.getUserName());
        pstmt.setString(2, user.getGender());
        pstmt.setString(3, user.getPassword());

        pstmt.executeUpdate();
    }
}
```