To Backup Created Packages and Test Them for Stock Management Application.

Source Code

```
package com.app.DatabaseConnecttion;

import      java.sql.Connection;
import
java.sql.DriverManager;
import java.sql.SQLException;


public class DatabaseConnector {
        private static final String JDBC_URL = "jdbc:mysql://localhost:3306/ecommerce";
        private static final String USERNAME = "root";
        private static final String PASSWORD = "root";
        static {
          try {
            Class.forName("com.mysql.cj.jdbc.Driver");
          } catch (ClassNotFoundException e) {
            e.printStackTrace();
          }
        }


        public static Connection getConnection() throws SQLException {
          return       DriverManager.getConnection(JDBC_URL,       USERNAME,
          PASSWORD);
```

```
            }
        }
```

```
package com.app.ecommerce.Test;


import org.testng.annotations.Test;


import com.app.DatabaseConnecttion.ProductDAO;


public class ECommerceApp {
        @Test
        public void testCheckStockAvailability() {
    String productName = "Laptop";
    ProductDAO productDAO = new ProductDAO();
    int stockQuantity = productDAO.getStockQuantity(productName);


    // Display stock information
    System.out.println("========================================");
     System.out.println("| Stock Availability            |");
    System.out.println("========================================");
    System.out.println("| Product Name | Stock Quantity |");
    System.out.println("========================================");
    System.out.printf("| %-13s | %-15d |%n", productName, stockQuantity);
    System.out.println("========================================");
  }
}
```

```
package com.app.DatabaseConnecttion;
```

```
import java.sql.Connection;

import  java.sql.PreparedStatement;  import

java.sql.ResultSet;

import java.sql.SQLException;


public class ProductDAO {



       public int getStockQuantity(String productName) {

    int stockQuantity = 0;


    try (Connection connection = DatabaseConnector.getConnection()) {

      String sql = "SELECT stock_quantity FROM products WHERE product_name = ?";

      try  (PreparedStatement  preparedStatement  =  connection.prepareStatement(sql))  {

      preparedStatement.setString(1, productName);

        ResultSet resultSet = preparedStatement.executeQuery();

        if (resultSet.next()) {

          stockQuantity = resultSet.getInt("stock_quantity");


        }

      }


    } catch (SQLException e) {

      e.printStackTrace();

    }
```

```
        return stockQuantity;
      }
   }

//     public List<String> getSimilarProducts(String productName) {
 //
//                                  //=======================TO fetch all Products from Db
//          List<String> allProducts = new ArrayList<>();
 //
//          try (Connection connection = DatabaseConnector.getConnection()) {
//            String sql = "SELECT product_name FROM products";
 //         try  (PreparedStatement  preparedStatement  =  connection.prepareStatement(sql))  {  //
            ResultSet resultSet = preparedStatement.executeQuery();
 //
//                 while (resultSet.next()) {
//                     allProducts.add(resultSet.getString("product_name"));
//                 }
//             }
//         } catch (SQLException e) {
//             e.printStackTrace();
//          }
//          return allProducts;
//      }
 //}
```

```
      //============================TO Fetch Only similar products from
  DB //  List<String> similarProducts = new ArrayList<>();
  //
//          try (Connection connection = DatabaseConnector.getConnection()) {
  // String sql = "SELECT product_name FROM products WHERE product_name LIKE ?"; //
  try (PreparedStatement preparedStatement = connection.prepareStatement(sql)) {
//                preparedStatement.setString(1, "%" + productName + "%");
//                 ResultSet resultSet = preparedStatement.executeQuery();
  //
//                while (resultSet.next()) {
//                    similarProducts.add(resultSet.getString("product_name"));
//                }
//            }
//        } catch (SQLException e) {
//            e.printStackTrace();
//        }
  //
//          return similarProducts;
//      }
  //
//     }
```