To Backup Created Packages and Test Them for StockManagement 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;
//    }
//
//    }
```