

## Code: -

### MySQL Code: -

CREATE DATABASE IF NOT EXISTS product\_db;

USE product\_db;

CREATE TABLE IF NOT EXISTS products (

product\_id INT AUTO\_INCREMENT PRIMARY KEY,

product\_name VARCHAR(255) NOT NULL,

description TEXT,

price DECIMAL(10, 2) NOT NULL

);

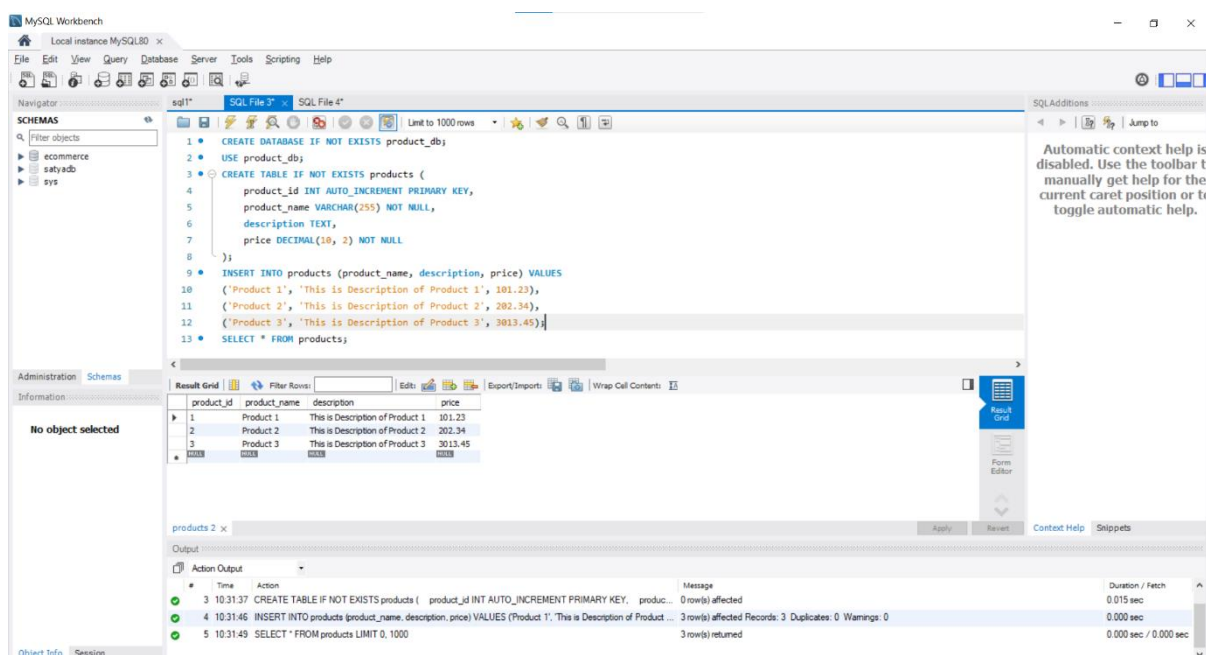
INSERT INTO products (product\_name, description, price) VALUES

('Product 1', 'This is Description of Product 1', 101.23),

('Product 2', 'This is Description of Product 2', 202.34),

('Product 3', 'This is Description of Product 3', 3013.45);

SELECT \* FROM products;



### Index.html: -

```
<!DOCTYPE html>
<html>
<head>
    <title>Product Details</title>
</head>
<body>
    <h2>Enter Product ID:</h2>
    <form action="ProductServlet" method="get">
        <input type="text" name="productId">
        <input type="submit" value="Submit">
    </form>
</body>
</html>
```

### ProductServlet.java: -

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.sql.*;

public class ProductServlet extends HttpServlet {
    private static final String JDBC_URL = "jdbc:mysql://localhost:3306/product_db";
    private static final String JDBC_USER = "root";
```

```

private static final String JDBC_PASSWORD = "Satti@2001";

protected void doGet(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    String productId = request.getParameter("productId");
    Connection conn = null;
    PreparedStatement stmt = null;
    ResultSet rs = null;

    try {
        // Establish database connection
        Class.forName("com.mysql.cj.jdbc.Driver");
        conn = DriverManager.getConnection(JDBC_URL, JDBC_USER,
JDBC_PASSWORD);

        // Prepare SQL query
        String sql = "SELECT * FROM products WHERE product_id=?";
        stmt = conn.prepareStatement(sql);
        stmt.setString(1, productId);

        // Execute query
        rs = stmt.executeQuery();

        if (rs.next()) {
            // Product found, display details
            String productName = rs.getString("product_name");
            String description = rs.getString("description");
            double price = rs.getDouble("price");

```

```

        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        out.println("<html><body>");
        out.println("<h2>Product Details:</h2>");
        out.println("<p><strong>Product ID:</strong> " + productId + "</p>");
        out.println("<p><strong>Name:</strong> " + productName + "</p>");
        out.println("<p><strong>Description:</strong> " + description + "</p>");
        out.println("<p><strong>Price:</strong> $" + price + "</p>");
        out.println("</body></html>");
    } else {
        // Product not found
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        out.println("<html><body>");
        out.println("<h2>Product Not Found</h2>");
        out.println("<p>The product with ID " + productId + " does not exist.</p>");
        out.println("</body></html>");
    }
} catch (Exception e) {
    e.printStackTrace();
} finally {
    // Close resources
    try {
        if (rs != null) rs.close();
        if (stmt != null) stmt.close();
        if (conn != null) conn.close();
    } catch (SQLException e) {

```

```
        e.printStackTrace();
    }
}
}
```

## **Web.xml: -**

```
<web-app>
  <servlet>
    <servlet-name>ProductServlet</servlet-name>
    <servlet-class>ProductServlet</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>ProductServlet</servlet-name>
    <url-pattern>/ProductServlet</url-pattern>
  </servlet-mapping>
  <welcome-file-list>
    <welcome-file>index.html</welcome-file>
  </welcome-file-list>
</web-app>
```