**Algorithm\_for\_Retrieving\_the\_Product\_Details\_Using\_the\_Product \_ID**

1. **User submits a product ID through an HTML form:**
   * The HTML form contains a field for entering the product ID.
   * The form is submitted to the servlet when the user clicks the submit button.
2. **Servlet receives the product ID from the request:**
   * The servlet, mapped to the specified URL pattern ("/ProductServlet"), handles the request.
3. **Load JDBC Driver:**
   * Load the JDBC driver for MySQL (com.mysql.cj.jdbc.Driver).
4. **Establish Database Connection:**
   * Use DriverManager to establish a connection to the MySQL database (jdbc:mysql://localhost:3306/ecommerce).
5. **Prepare SQL Query:**
   * Prepare a SQL query using a PreparedStatement to select product details based on the provided product ID.
6. **Execute Query and Retrieve Results:**
   * Execute the query and obtain a ResultSet containing the product details.
7. **Process Results:**
   * If the ResultSet has at least one row:
     + Extract product details (product name, price) from the result.
     + Print or send the product details as a response to the user.
   * If the ResultSet is empty:
     + Print or send a message indicating that the product was not found.
8. **Handle Exceptions:**
   * Catch and handle any ClassNotFoundException or SQLException that may occur during the process.
   * Print error information or throw a ServletException.
9. **Close Resources:**
   * Close the ResultSet, PreparedStatement, and Connection to release resources.
10. **HTML Response:**

* The servlet generates an HTML response, either displaying the product details or an error message, and sends it back to the user's browser.

1. **Display Result on the Client Side:**

* The user sees the result (product details or error message) on the browser.