

Q->Create a table in the database containing the columns to store book details like: book name,authors, & price.

Ans->

```
CREATE TABLE books (
  id INT NOT NULL AUTO_INCREMENT,
  name VARCHAR(255) NOT NULL,
  authors VARCHAR(255) NOT NULL,
  price DECIMAL(10,2) NOT NULL,
  PRIMARY KEY (id)
);
```

```
mysql> use sam
Database changed
mysql> select * from books;
```

id	name	authors	price
1	Java	James Gosling	500.00
2	c++	Bjarne Stroustrup	450.00
3	c	Dennis M. Ritchie	350.00
4	c#	Anders Hejlsberg	350.00
5	Python	Guido van Rossum	550.00

```
5 rows in set (0.01 sec)
```

Q->Create a JSP page to search a book inside the book table and display the output.

Ans->

```
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>
<%@ page import="java.sql.*" %>
<%@ page import="java.io.*" %>
<%@ page import="java.util.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Book Search</title>
```

```

</head>

<body>

    <h1>Book Search</h1>

    <form method="post" action="index.jsp">

        <label for="title">Title:</label>

        <input type="text" name="title" id="title">

        <br><br>

        <label for="author">Author:</label>

        <input type="text" name="author" id="author">

        <br><br>

        <button type="submit">Search</button>

    </form>

    <h2>Search Results</h2>

    <%

        String title = request.getParameter("title");

        String author = request.getParameter("author");

        if(title != null || author != null) {

            // Connect to the database

            Connection conn = null;

            Statement stmt = null;

            ResultSet rs = null;

            try {

                Class.forName("com.mysql.jdbc.Driver");

                conn =

                DriverManager.getConnection("jdbc:mysql://localhost:3306/sam","root","9860457864");

                stmt = conn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,

                    ResultSet.CONCUR_UPDATABLE);

                String query = "SELECT * FROM books WHERE ";

```

```

        if(title != null && !title.isEmpty()) {
            query += "name LIKE '%" + title + "%' AND ";
        }

        if(author != null && !author.isEmpty()) {
            query += "authors LIKE '%" + author + "%' AND ";
        }

        query += "1=1"; // To complete the WHERE clause

        rs = stmt.executeQuery(query);

        if(rs.next()) {
%>
<table border="1">
    <tr>
        <th>Title</th>
        <th>Author</th>
        <th>ISBN</th>
    </tr>
<%
        rs.beforeFirst(); // Move the cursor back to the beginning
        while(rs.next()) {
            String bookTitle = rs.getString("name");
            String bookAuthor = rs.getString("authors");
            int bookISBN = rs.getInt("price");
%>
<tr>
    <td><%=bookTitle %></td>
    <td><%=bookAuthor %></td>
    <td><%=bookISBN %></td>
</tr>
<%        }

```

```
    } else {  
        out.println("<p>No books found.</p>");  
    }  
  
    } catch (Exception e) {  
        out.println("<p>Error: " + e.getMessage() + "</p>");  
    } finally {  
        try {  
            if(rs != null) rs.close();  
            if(stmt != null) stmt.close();  
            if(conn != null) conn.close();  
        } catch (SQLException e) {  
            out.println("<p>Error closing resources: " + e.getMessage() + "</p>");  
        }  
    }  
}  
%>  
  
</table>  
  
</body>  
  
</html>
```

Book Search

Title:

Author:

Search Results

Title	Author	ISBN
Java	James Gosling	500