

REG NO. : 412422205009

NAME : AKASH RAJ L

SOURCE CODE :

SQL COMMANDS :

```
mysql> -- Create the database
```

```
mysql> CREATE DATABASE IF NOT EXISTS examdb;
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql>
```

```
mysql> -- Switch to the database
```

```
mysql> USE examdb;
```

```
Database changed
```

```
mysql>
```

```
mysql> -- Create the questions table
```

```
mysql> CREATE TABLE IF NOT EXISTS questions (
```

```
    -> question_id INT PRIMARY KEY AUTO_INCREMENT,
```

```
    -> question_text TEXT,
```

```
    -> option_a VARCHAR(100),
```

```
    -> option_b VARCHAR(100),
```

```
    -> option_c VARCHAR(100),
```

```
    -> option_d VARCHAR(100),
```

```
    -> correct_option CHAR(1)
```

```
    -> );
```

```
Query OK, 0 rows affected (0.02 sec)
```

```
mysql>
```

```
mysql> -- Insert questions into the questions table
```

```
mysql> INSERT INTO questions (question_text, option_a, option_b, option_c, option_d, correct_option)
```

```
    -> VALUES
```

```
    -> ('What is the capital of France?', 'Berlin', 'Madrid', 'Paris', 'Rome', 'C'),
```

```
    -> ('Which gas do plants primarily use for photosynthesis?', 'Oxygen', 'Nitrogen', 'Carbon Dioxide', 'Helium', 'C'),
```

```
    -> ('What is the currency of Japan?', 'Yen', 'Dollar', 'Euro', 'Peso', 'A'),
```

```
    -> ('What is the largest planet in our solar system?', 'Earth', 'Mars', 'Saturn', 'Jupiter', 'D'),
```

-> ('What element has the chemical symbol "O"?', 'Gold', 'Oxygen', 'Osmium', 'Helium', 'B'),
 -> ('What is the primary language spoken in Brazil?', 'Spanish', 'French', 'Portuguese', 'Italian', 'C'),
 -> ('Which organ is responsible for pumping blood in the human body?', 'Liver', 'Lungs', 'Heart', 'Brain', 'C'),
 -> ('What is the square root of 64?', 'Six', 'Seven', 'Eight', 'Nine', 'C'),
 -> ('Which animal is known as the "King of the Jungle"?', 'Tiger', 'Bear', 'Lion', 'Elephant', 'C'),
 -> ('What is the hardest natural substance on Earth?', 'Gold', 'Iron', 'Diamond', 'Quartz', 'C');

Query OK, 10 rows affected (0.00 sec)

Records: 10 Duplicates: 0 Warnings: 0

mysql> select * from questions;

question_id	question_text	option_a	option_b	option_c	option_d	correct_option
1	What is the capital of France?	Berlin	Madrid	Paris	Rome	C
2	Which gas do plants primarily use for photosynthesis?	Oxygen	Nitrogen	Carbon Dioxide	Helium	C
3	What is the currency of Japan?	Yen	Dollar	Euro	Peso	A
4	What is the largest planet in our solar system?	Earth	Mars	Saturn	Jupiter	D
5	What element has the chemical symbol "O"?	Gold	Oxygen	Osmium	Helium	B
6	What is the primary language spoken in Brazil?	Spanish	French	Portuguese	Italian	C
7	Which organ is responsible for pumping blood in the human body?	Liver	Lungs	Heart	Brain	C
8	What is the square root of 64?	Six	Seven	Eight	Nine	C
9	Which animal is known as the "King of the Jungle"?	Tiger	Bear	Lion	Elephant	C
10	What is the hardest natural substance on Earth?	Gold	Iron	Diamond	Quartz	C

10 rows in set (0.00 sec)

Login.jsp

```
<html>
```

```
<head>
```

```
  <title>Login - Online Examination</title>
```

```
</head>
```

```
<body>
```

```
  <h2>Login</h2>
```

```
  <form action="exam.jsp" method="post">
```

```
    <label for="name">Name:</label>
```

```
    <input type="text" id="name" name="name" required><br><br>
```

```
    <label for="sitId">SIT ID:</label>
```

```
    <input type="text" id="sitId" name="sitId" required><br><br>
```

```
    <label for="regNo">Registration No:</label>
```

```
    <input type="text" id="regNo" name="regNo" required><br><br>
```

```
        <input type="submit" value="Start Exam">
    </form>
</body>
</html>
```

exam.jsp

```
<%@ page import="java.sql.Connection, java.sql.DriverManager, java.sql.PreparedStatement,
java.sql.ResultSet" %>
<%
String jdbcURL = "jdbc:mysql://localhost:3306/examdb";
String jdbcUsername = "root";
String jdbcPassword = "root";

Connection connection = null;
PreparedStatement preparedStatement = null;
ResultSet rs = null;

String name = request.getParameter("name");
String sitId = request.getParameter("sitId");
String regNo = request.getParameter("regNo");

try {
    Class.forName("com.mysql.jdbc.Driver");
    connection = DriverManager.getConnection(jdbcURL, jdbcUsername, jdbcPassword);
    String query = "SELECT * FROM questions";
    preparedStatement = connection.prepareStatement(query);
    rs = preparedStatement.executeQuery();
} catch (Exception e) {
    e.printStackTrace();
}
%>
<html>
<head>
    <title>Online Examination</title>
</head>
<body>
```

<h2>Online Examination</h2>

<!-- Display user details -->

<p>Name: <%= name %></p>

<p>SIT ID: <%= sitId %></p>

<p>Registration No: <%= regNo %></p>

<!-- Display questions -->

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

<input type="hidden" name="name" value="<%= name %>">

<input type="hidden" name="sitId" value="<%= sitId %>">

<input type="hidden" name="regNo" value="<%= regNo %>">

<%

int questionNumber = 1;

while (rs.next()) {

%>

<div>

<p><%= questionNumber++ %>. <%= rs.getString("question_text") %></p>

<input type="radio" name="q<%= rs.getInt("question_id") %>" value="A"> <%=
rs.getString("option_a") %>

<input type="radio" name="q<%= rs.getInt("question_id") %>" value="B"> <%=
rs.getString("option_b") %>

<input type="radio" name="q<%= rs.getInt("question_id") %>" value="C"> <%=
rs.getString("option_c") %>

<input type="radio" name="q<%= rs.getInt("question_id") %>" value="D"> <%=
rs.getString("option_d") %>

</div>

<%

}

rs.close();

preparedStatement.close();

connection.close();

%>

<input type="submit" value="Submit Exam">

</form>

</body>

</html>

Result.jsp

```
<%@ page import="java.sql.Connection, java.sql.DriverManager, java.sql.PreparedStatement,
java.sql.ResultSet" %>
<%
String jdbcURL = "jdbc:mysql://localhost:3306/examdb";
String jdbcUsername = "root";
String jdbcPassword = "root";

Connection connection = null;
PreparedStatement preparedStatement = null;
ResultSet rs = null;

String name = request.getParameter("name");
String sitId = request.getParameter("sitId");
String regNo = request.getParameter("regNo");
int score = 0;
int totalQuestions = 0;
try {
    Class.forName("com.mysql.jdbc.Driver");
    connection = DriverManager.getConnection(jdbcURL, jdbcUsername, jdbcPassword);
    String query = "SELECT * FROM questions";
    preparedStatement = connection.prepareStatement(query);
    rs = preparedStatement.executeQuery();
    while (rs.next()) {
        totalQuestions++;
        int questionId = rs.getInt("question_id");
        String correctOption = rs.getString("correct_option");
        String userAnswer = request.getParameter("q" + questionId);
        if (userAnswer != null && userAnswer.equals(correctOption)) {
            score++;
        }
    }
} catch (Exception e) {
    e.printStackTrace();
}
```

```

} finally {
    try {
        if (rs != null) rs.close();
        if (preparedStatement != null) preparedStatement.close();
        if (connection != null) connection.close();
    } catch (Exception e) {
        e.printStackTrace();
    }
}

```

```
float percentage = (float) score / totalQuestions * 100;
```

```
%>
```

```
<html>
```

```
<head>
```

```
    <title>Exam Result</title>
```

```
</head>
```

```
<body>
```

```
    <h2>Exam Result</h2>
```

```
    <!-- Display user details in a table -->
```

```
    <table border="1">
```

```
        <tr>
```

```
            <th>Name</th>
```

```
            <th>SIT ID</th>
```

```
            <th>Registration No</th>
```

```
            <th>Score</th>
```

```
        </tr>
```

```
        <tr>
```

```
            <td><%= name %></td>
```

```
            <td><%= sitId %></td>
```

```
            <td><%= regNo %></td>
```

```
            <td><%= score %> / <%= totalQuestions %></td>
```

```
        </tr>
```

```
    </table>
```

```
    <!-- Display percentage score separately -->
```

```
    <h3>Your Score: <%= percentage %> %</h3>
```

```
</body>
```

```
</html>
```

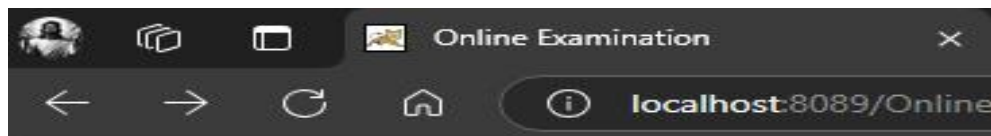
OUTPUT :

Login

Name:

SIT ID:

Registration No:



Online Examination

Name: AKASH RAJ L

SIT ID: SIT22IT015

Registration No: 412422205009

1. What is the capital of France?

- ☐ Berlin
- ☐ Madrid
- ☐ Paris
- ☐ Rome

2. Which gas do plants primarily use for photosynthesis?

- ☐ Oxygen
- ☐ Nitrogen
- ☐ Carbon Dioxide
- ☐ Helium

3. What is the currency of Japan?

- ☐ Yen
- ☐ Dollar
- ☐ Euro
- ☐ Peso

4. What is the largest planet in our solar system?

- ☐ Earth
- ☐ Mars
- ☐ Saturn
- ☐ Jupiter

5. What element has the chemical symbol "O"?

- ☐ Gold
- ☐ Oxygen
- ☐ Osmium
- ☐ Helium

6. What is the primary language spoken in Brazil?

- ☐ Spanish
- ☐ French
- ☐ Portuguese
- ☐ Italian

7. Which organ is responsible for pumping blood in the human body?

- ☐ Liver
- ☐ Lungs
- ☐ Heart
- ☐ Brain

8. What is the square root of 64?

- ☐ Six
- ☐ Seven
- ☐ Eight
- ☐ Nine

9. Which animal is known as the "King of the Jungle"?

- ☐ Tiger
- ☐ Bear
- ☐ Lion
- ☐ Elephant

10. What is the hardest natural substance on Earth?

- ☐ Gold
- ☐ Iron
- ☐ Diamond
- ☐ Quartz

Submit Exam

Exam Result

Name	SIT ID	Registration No	Score
AKASH RAJ L	SIT22IT015	412422205009	0 / 10

Your Score: 0.0 %