**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'),

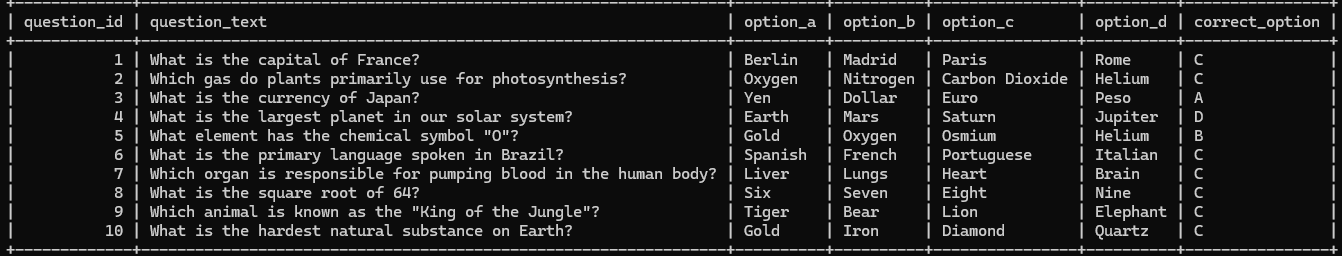
-> ('Which animal is known as the "King of the Jungle"?', 'Tiger', 'Bear', 'Lion', 'Elephant', 'C'),

-> ('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;



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

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

<p><strong>Registration No:</strong> <%= 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") %><br>

<input type="radio" name="q<%= rs.getInt("question\_id") %>" value="B"> <%= rs.getString("option\_b") %><br>

<input type="radio" name="q<%= rs.getInt("question\_id") %>" value="C"> <%= rs.getString("option\_c") %><br>

<input type="radio" name="q<%= rs.getInt("question\_id") %>" value="D"> <%= rs.getString("option\_d") %><br>

</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 :**

