❖ **Develop a Simple Servlet Question Answer Application using Database.**

➢ **Code:**

## ● **mySQL Queries:**

create database qadb; use qabd;

create table quiz (qno varchar(5) PRIMARY KEY,question varchar(100), op1 varchar(50), op2 varchar(50), op3 varchar(50), op4 varchar(50), ans varchar(50));

insert into quiz values('001','What is the capital of India??','New Delhi','Kolkata','Chennai','Mumbai','New Delhi');

insert into quiz values('002','Who was the First President of India??','Dr. Rajendra Prasad','Dr.

S. Radhakrishnan','Ram Nath Kovind','V. V. Giri','Dr. Rajendra Prasad');

insert into quiz values('003','What is ORM','Object Ratio Mean','Object Rotation Measure','Object Relation Mapping','Oracle Request Management','Object Relation Mapping'); insert into quiz values('004','Unit of Energy is ','Dozon','Kilo Meter ','Joul','Hertz','Joul'); insert into quiz values('005',' --- is the smallest memory unit.','bit','byte','Kilo Byte','Giga Byte','bit');

## ● **index.html**

<html>

<head>

<title>Practical 6</title>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

</head>

<body>

<h1>Welcome to Quiz Servlet</h1>

<h1><a href="QuizServlet">Click to start Quiz!</a></h1>

</body>

</html>

● **QuizServlet** package mypack; import java.sql.\*;

import java.io.\*; import javax.servlet.\*;

import javax.servlet.http.\*;

public class QuizServlet extends HttpServlet { @Override

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

response.setContentType("text/html;charset=UTF-8"); try (PrintWriter out = response.getWriter()) {

out.println("<form action='ShowResult' method='post'>");

Class.forName("com.mysql.jdbc.Driver"); try (Connection con =

DriverManager.getConnection("jdbc:mysql://localhost:3306/qadb", "root", "12345678"); Statement stmt = con.createStatement();

ResultSet res = stmt.executeQuery("SELECT \* FROM quiz")) {

out.println("<table border='1'>");

out.println("<h3>Select the correct option for the following MCQs!!!</h3>");

int qno = 0;

while (res.next()) { qno++;

out.println("<tr><td>" + res.getString(1) + "</td>"); out.println("<tr><td>" + res.getString(2) + "</td></tr>"); out.println("<tr><td><input type='radio' name='" + qno + "' value='" +

res.getString(3) + "'></td><td>" + res.getString(3) + "</td></tr>"); out.println("<tr><td><input type='radio' name='" + qno + "' value='" +

res.getString(4) + "'></td><td>" + res.getString(4) + "</td></tr>"); out.println("<tr><td><input type='radio' name='" + qno + "' value='" +

res.getString(5) + "'></td><td>" + res.getString(5) + "</td></tr>"); out.println("<tr><td><input type='radio' name='" + qno + "' value='" +

res.getString(6) + "'></td><td>" + res.getString(6) + "</td></tr>");

}

out.println("</table>"); out.println("<input type='reset'>");

out.println("<input type='submit' value='SUBMIT'>"); out.println("</form>");

} catch (SQLException e) { out.println(e.getMessage());

}

} catch (ClassNotFoundException e) { e.printStackTrace();

}

}

}

## ● **ShowResult**

package mypack;

import java.io.\*; import java.sql.\*; import javax.servlet.\*;

import javax.servlet.http.\*;

public class ShowResult extends HttpServlet { @Override

protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

response.setContentType("text/html;charset=UTF-8");

try (PrintWriter out = response.getWriter()) { Class.forName("com.mysql.jdbc.Driver"); try (Connection con =

DriverManager.getConnection("jdbc:mysql://localhost:3306/qadb", "root", "12345678"); Statement stmt = con.createStatement();

ResultSet res = stmt.executeQuery("SELECT ans FROM quiz")) {

int count = 0, qno = 0; while (res.next()) {

if (res.getString(1).equals(request.getParameter("" + (++qno)))) { count++;

out.println("<h1>Correct</h1>");

} else {

out.println("<h1>Incorrect</h1>");

}

}

out.println("<h1>Your Score is " + count + "</h1>");

} catch (SQLException e) { out.println(e.getMessage());

}

} catch (ClassNotFoundException e) {

e.printStackTrace();

}

}

}