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24MCA0242

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1. Create a table in Derby back end to represent employee details like id, name, gender, BP (Baisc Pay), DA(Dearness Allowance), HRA(House Rent Allowance) in percentage (the value must be between 1 and 100), hobbies of employee.
2. Develop a console based Java application to insert 'n' records into the table. Collect the input for the table from users. (Note: Should include 'derbyclient.jar' in libraries under the project. Should start the JavaDB server under 'Services')

CODE 1 and 2:

```
package javaapplication1_akb;

import java.sql.*;

import java.util.Scanner;

public class JavaApplication1_akb {

    static String url = "jdbc:derby://localhost:1527/akb_db";

    static String uid = "akb";

    static String pwd = "akb";

    static Connection con;

    static PreparedStatement ps;

    static int Emp_Id;

    static String E_name;

    static String Gender;

    static int BasicPay;

    static int DA;

    static int HRA;

    static String query;

    static Scanner inp = new Scanner(System.in);

    public static void main(String[] args) {

        try {
```

```

System.out.println("Connecting to database...");

con = DriverManager.getConnection(url, uid, pwd);

System.out.println("Connected with database");

System.out.println("Enter the number of records to insert:");

int n = inp.nextInt();

inp.nextLine();

query = "INSERT INTO Employee (Emp_Id, E_Name, Gender, BasicPay, DA, HRA)
VALUES (?, ?, ?, ?, ?, ?)";

ps = con.prepareStatement(query);

for (int i = 0; i < n; i++) {

    System.out.println("Enter details for employee " + (i + 1) + ":");

    System.out.print("Employee ID: ");

    Emp_Id = inp.nextInt();

    inp.nextLine();

    System.out.print("Name: ");

    E_name = inp.nextLine();

    System.out.print("Gender: ");

    Gender = inp.nextLine();

    System.out.print("Basic Pay: ");

    BasicPay = inp.nextInt();

    System.out.print("DA: ");

    DA = inp.nextInt();

    System.out.print("HRA: ");

    HRA = inp.nextInt();

    ps.setInt(1, Emp_Id);

    ps.setString(2, E_name);

    ps.setString(3, Gender);

    ps.setInt(4, BasicPay);

```

```

        ps.setInt(5, DA);

        ps.setInt(6, HRA);

        int result = ps.executeUpdate();

        if (result == 1) {

            System.out.println("Record " + (i + 1) + " inserted successfully.");

        } else {

            System.out.println("Unable to insert record " + (i + 1) + ".");

        }

    }

    con.close();

} catch (SQLException e) {

    System.out.println("Error in SQLException: " + e.toString());

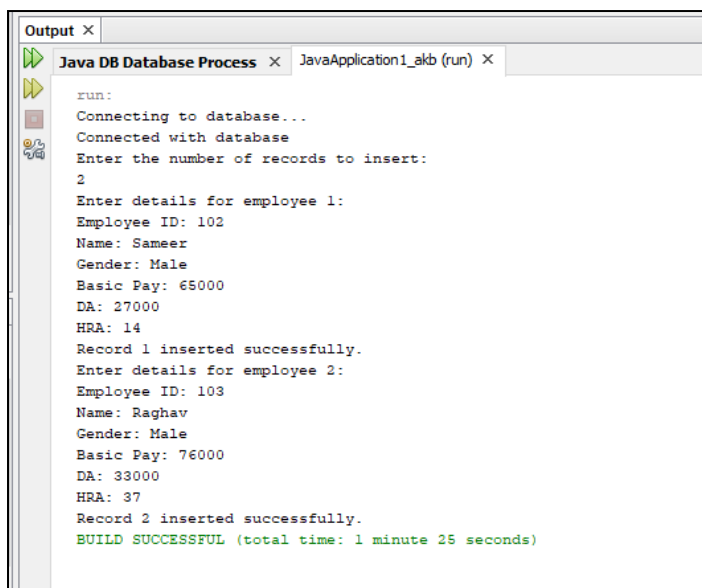
}

}

}

```

OUTPUT FOR 1 and 2:



```

Output x
Java DB Database Process x JavaApplication1_akb (run) x

Run:
Connecting to database...
Connected with database
Enter the number of records to insert:
2
Enter details for employee 1:
Employee ID: 102
Name: Sameer
Gender: Male
Basic Pay: 65000
DA: 27000
HRA: 14
Record 1 inserted successfully.
Enter details for employee 2:
Employee ID: 103
Name: Raghav
Gender: Male
Basic Pay: 76000
DA: 33000
HRA: 37
Record 2 inserted successfully.
BUILD SUCCESSFUL (total time: 1 minute 25 seconds)

```

select * from AKB.EMPLOYEE...							
#	EMP_ID	E_NAME	GENDER	BASICPAY	DA	HRA	
1	101	Reev	Male	56000	23000		23
2	102	Sameer	Male	65000	27000		14
3	103	Raghav	Male	76000	33000		37

3. Create a Java Web Application with servlet to do the following:

a. Create a HTML form to collect the employee details and transfer the details to the servlet upon clicking the submit button of the form.

b. Display the employee details through the servlet code.

CODE:

```
import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/EmployeeServlet")

public class EmployeeServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;

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

        response.setContentType("text/html");

        PrintWriter out = response.getWriter();

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

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

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

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

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

        out.println("<html><body>");

        out.println("<h2>Employee Details</h2>");

        out.println("<p>Name: " + name + "</p>");

        out.println("<p>Gender: " + gender + "</p>");
```

```
        out.println("<p>Basic Pay: " + basicPay + "</p>");  
        out.println("<p>DA: " + da + "</p>");  
        out.println("<p>HRA: " + hra + "</p>");  
        out.println("</body></html>");  
    }  
}
```

OUTPUT:

Employee Details Form
Name:
Gender:
Basic Pay:
DA:
HRA: