

Main.java

```
package jdbcexamplea;

import java.sql.*;
import java.util.ArrayList;
import java.util.List;

public class main {
    public static void main(String[] args) {
        // Add employees
        employeeDAO.addEmployee("Alice Cooper", "Developer", 70000);
        employeeDAO.addEmployee("Bob Marley", "Manager", 80000);

        // Update employee

        employeeDAO.updateEmployee( 1,"John Doe", "Senior Software Engineer", 90000);
        // Get all employees
        List<Employee> employees = employeeDAO.getAllEmployees();
        employees.forEach(System.out::println);
        // Delete employee
        employeeDAO.deleteEmployee(2);
    }
}
```

employeeDAO.java

```
package jdbcexamplea;

import java.sql.*;
import java.util.ArrayList;
import java.util.List;

public class employeeDAO {

    // Create an employee

    public static void addEmployee(String name, String position, double salary) {
        String sql = "INSERT INTO employees (name, position, salary) VALUES(?, ?, ?)";
        try (Connection conn = databaseconnec.getConnection();
            PreparedStatement stmt = conn.prepareStatement(sql)) {
            stmt.setString(1, name);
            stmt.setString(2, position);
            stmt.setDouble(3, salary);
            int rowsAffected = stmt.executeUpdate();
            System.out.println("Employee added successfully. Rows affected: "+ rowsAffected);
        } catch (SQLException e) {
            e.printStackTrace();
        }
    }

    public static List <Employee> getAllEmployees() {
        List<Employee> employees = new ArrayList<>();
        String sql =("SELECT * FROM employees") ;
        try (Connection conn = databaseconnec.getConnection();
            Statement stmt = conn.createStatement();
            ResultSet rs = stmt.executeQuery(sql)) {
            while (rs.next()) {
                Employee employee = new Employee(
                    rs.getInt("id"),
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rs.getString("name"),
rs.getString("position"),
rs.getDouble("salary")
);
employees.add(employee);
}
} catch (SQLException e) {
e.printStackTrace();
}
return employees;
}

// Update an employee's information
public static void updateEmployee(int id, String name, String position, double salary) {
    String sql = "UPDATE employees SET name = ?, position = ?, salary = ? WHERE id = ?"; // Corrected SQL

    try (Connection conn = databaseconnec.getConnection();
        PreparedStatement stmt = conn.prepareStatement(sql)) {
        stmt.setString(1, name);
        stmt.setString(2, position);
        stmt.setDouble(3, salary);
        stmt.setInt(4, id);

        int rowsAffected = stmt.executeUpdate();

        System.out.println("Employee updated successfully. Rows affected: " + rowsAffected);
    } catch (SQLException e) {
        e.printStackTrace();
    }
}

// Delete an employee
public static void deleteEmployee(int id) {
    String sql = "DELETE FROM employees WHERE id = ?";

    try (Connection conn = databaseconnec.getConnection();

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PreparedStatement stmt = conn.prepareStatement(sql)) {
    stmt.setInt(1, id);
    int rowsAffected = stmt.executeUpdate();
    System.out.println("Employee deleted successfully. Rows affected: " + rowsAffected);
} catch (SQLException e) {
    e.printStackTrace();
}
}
}

```

Databaseconnec.java

```

package jdbcexamplea;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;

public class databaseconnec {
    private static final String URL ="jdbc:mysql://localhost:3306/employee_db"; // Database URL
    private static final String USER = "root"; // Your MySQL username
    private static final String PASSWORD = ""; // Your MySQL password
    public static Connection getConnection() throws SQLException {
        try {
            // Load the JDBC driver
            Class.forName("com.mysql.cj.jdbc.Driver");
            // Return the database connection
            return DriverManager.getConnection(URL, USER, PASSWORD);
        } catch (ClassNotFoundException | SQLException e) {
            System.out.println("Connection failed:" + e.getMessage());
        }
    }
}

```

```
throw new SQLException("Failed to establish connection");
}
}
}
```

Employee.java

```
package jdbcexamplea;

public class Employee {
    private int id;
    private String name;
    private String position;
    private double salary;




    public Employee(int id, String name, String position, double salary) {
        this.id = id;
        this.name = name;
        this.position = position;
        this.salary = salary;
    }

    // Getters and setters
    public int getId() { return id; }
    public void setId(int id) { this.id = id; }
    public String getName() { return name; }
    public void setName(String name) { this.name = name; }
    public String getPosition() { return position; }
    public void setPosition(String position) { this.position = position; }
    public double getSalary() { return salary; }
    public void setSalary(double salary) { this.salary = salary; }

    @Override
    public String toString() {
```

```
return "Employee{id=" + id + ", name=" + name + ", position=" + position + ", salary=" + salary +
}';
}
}
```

Output:

<div><div>← T →</div><div></div></div>					id	name	position	salary		
<input type="checkbox"/>		Edit		Copy		Delete	1	John Doe	Senior Software Engineer	90000.00
<input type="checkbox"/>		Edit		Copy		Delete	3	Steve Brown	Team Lead	85000.00
<input type="checkbox"/>		Edit		Copy		Delete	4	Alice Cooper	Developer	70000.00
<input type="checkbox"/>		Edit		Copy		Delete	5	Bob Marley	Manager	80000.00
<input type="checkbox"/>		Edit		Copy		Delete	6	Alice Cooper	Developer	70000.00
<input type="checkbox"/>		Edit		Copy		Delete	7	Bob Marley	Manager	80000.00