**Spring Data JPA - Quick Example**

**PROGRAM IMPLEMENTATION :**

**pom.xml**

<project xmlns="http://maven.apache.org/POM/4.0.0"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://maven.apache.org/POM/4.0.0

http://maven.apache.org/xsd/maven-4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<groupId>com.example</groupId>

<artifactId>h2-demo</artifactId>

<version>0.0.1-SNAPSHOT</version>

<packaging>jar</packaging>

<parent>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-parent</artifactId>

<version>2.7.18</version>

</parent>

<dependencies>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-data-jpa</artifactId>

</dependency>

<dependency>

<groupId>com.h2database</groupId>

<artifactId>h2</artifactId>

<scope>runtime</scope>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter</artifactId>

</dependency>

</dependencies>

<properties>

<java.version>1.8</java.version>

</properties>

</project>

**SQL Schema**

CREATE DATABASE IF NOT EXISTS ormlearn;

USE ormlearn;

CREATE TABLE employee (

id INT PRIMARY KEY,

name VARCHAR(50)

);

INSERT INTO employee (id, name) VALUES

(1, 'Alice'),

(2, 'Bob'),

(3, 'Charlie'),

(4, 'David');

**Entity Class**

package com.example.model;

import javax.persistence.\*;

@Entity

@Table(name = "employee")

public class Employee {

@Id

private int id;

private String name;

// 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; }

@Override

public String toString() {

return "Employee{" + "id=" + id + ", name='" + name + '\'' + '}';

}

}

**Repository Interface**

package com.example.repository;

import com.example.model.Employee;

import org.springframework.data.jpa.repository.JpaRepository;

import org.springframework.stereotype.Repository;

@Repository

public interface EmployeeRepository extends JpaRepository<Employee, Integer> {

}

**Service Class:**

package com.cognizant.ormlearn.service;

import com.cognizant.ormlearn.model.Employee;

import com.cognizant.ormlearn.repository.EmployeeRepository;

import org.springframework.beans.factory.annotation.Autowired;

import org.springframework.stereotype.Service;

import org.springframework.transaction.annotation.Transactional;

import java.util.List;

@Service

public class EmployeeService {

@Autowired

private EmployeeRepository employeeRepository;

@Transactional

public List<Employee> getAllEmployees() {

return employeeRepository.findAll();

}

}

**OrmLearnApplication.java**

package com.cognizant.ormlearn;

import com.cognizant.ormlearn.model.Employee;

import com.cognizant.ormlearn.service.EmployeeService;

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

import org.springframework.context.ApplicationContext;

import java.util.List;

@SpringBootApplication

public class OrmLearnApplication {

private static final Logger LOGGER = LoggerFactory.getLogger(OrmLearnApplication.class);

private static EmployeeService employeeService;

public static void main(String[] args) {

ApplicationContext context = SpringApplication.run(OrmLearnApplication.class, args);

employeeService = context.getBean(EmployeeService.class);

testGetAllEmployees();

}

private static void testGetAllEmployees() {

LOGGER.info("Start");

List<Employee> employees = employeeService.getAllEmployees();

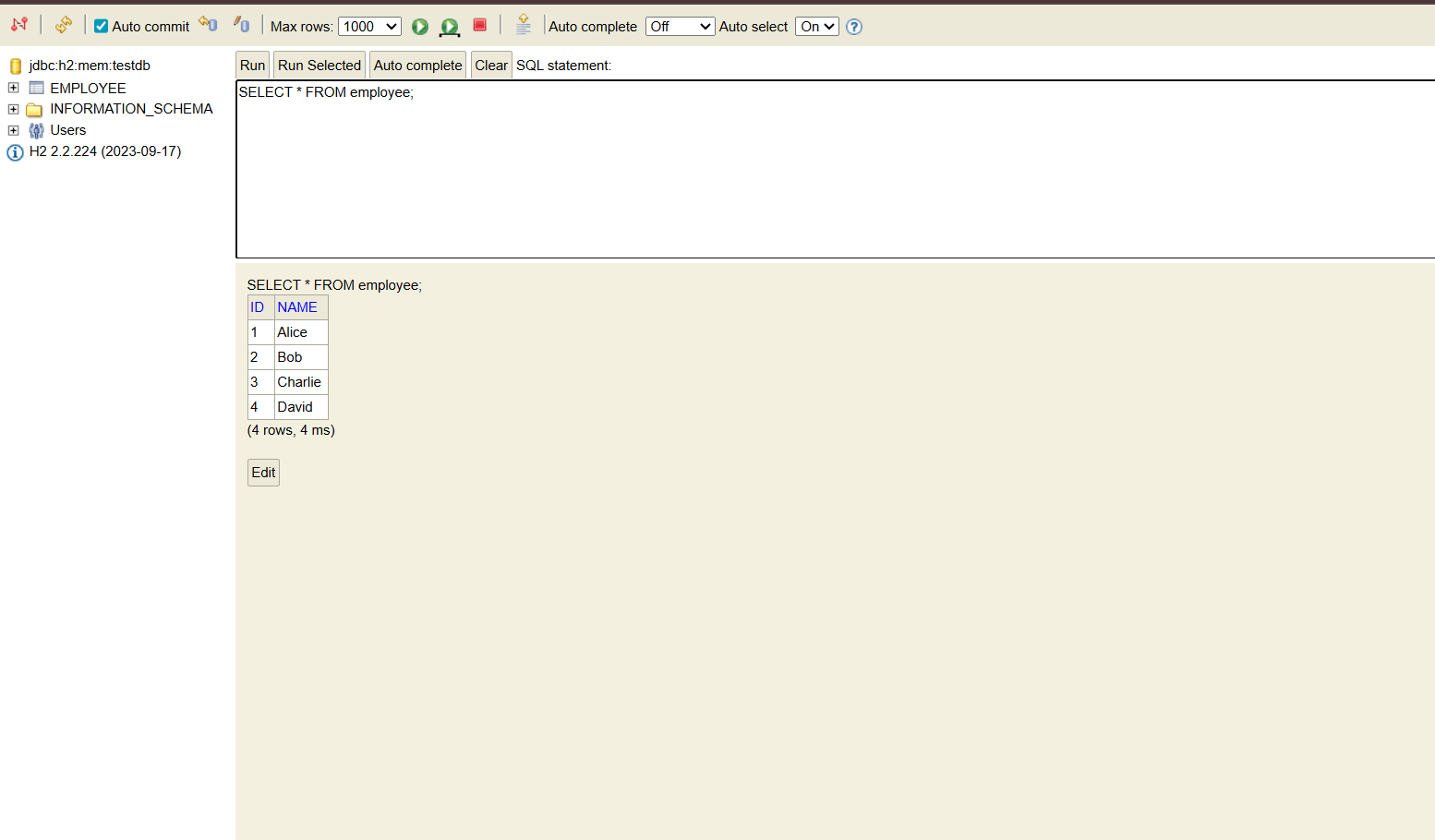
employees.forEach(e -> LOGGER.debug("{}", e));

LOGGER.info("End");

}

}

**OUTPUT :**

****