**Hands On 3: Create payroll tables and bean mapping**   
  
**Department.java**

package com.cognizant.employee.model;  
  
import jakarta.persistence.\*;  
import java.util.List;  
  
@Entity  
@Table(name = "department")  
public class Department {  
  
 @Id  
 @GeneratedValue(strategy = GenerationType.*IDENTITY*)  
 private int id;  
  
 @Column(name = "dp\_name")  
 private String name;  
  
 @OneToMany(mappedBy = "department", fetch = FetchType.*LAZY*)  
 private List<Employee> employeeList;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 List<Employee> getEmployeeList() { return employeeList; }  
 public void setEmployeeList(List<Employee> employeeList) { this.employeeList = employeeList; }  
  
 @Override  
 public String toString() {  
 return "Department{" +  
 "id=" + id +  
 ", name='" + name + '\'' +  
 '}';  
 }  
}

**Employee.java**

package com.cognizant.employee.model;  
  
import jakarta.persistence.\*;  
import java.util.Date;  
import java.util.Set;  
  
@Entity  
@Table(name = "employee")  
public class Employee {  
  
 @Id  
 @GeneratedValue(strategy = GenerationType.*IDENTITY*)  
 private int id;  
  
 @Column(name = "em\_name")  
 private String name;  
  
 @Column(name = "em\_salary")  
 private double salary;  
  
 @Column(name = "em\_permanent")  
 private boolean permanent;  
  
 @Column(name = "em\_date\_of\_birth")  
 private Date dateOfBirth;  
  
 @ManyToOne  
 @JoinColumn(name = "em\_dp\_id")  
 private Department department;  
  
 @ManyToMany  
 @JoinTable(  
 name = "employee\_skill",  
 joinColumns = @JoinColumn(name = "es\_em\_id"),  
 inverseJoinColumns = @JoinColumn(name = "es\_sk\_id")  
 )  
 private Set<Skill> skillList;  
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 double getSalary() { return salary; }  
 public void setSalary(double salary) { this.salary = salary; }  
  
 public boolean isPermanent() { return permanent; }  
 public void setPermanent(boolean permanent) { this.permanent = permanent; }  
  
 public Date getDateOfBirth() { return dateOfBirth; }  
 public void setDateOfBirth(Date dateOfBirth) { this.dateOfBirth = dateOfBirth; }  
  
 public Department getDepartment() { return department; }  
 public void setDepartment(Department department) { this.department = department; }  
  
 public Set<Skill> getSkillList() { return skillList; }  
 public void setSkillList(Set<Skill> skillList) { this.skillList = skillList; }  
  
 @Override  
 public String toString() {  
 return "Employee{" +  
 "id=" + id +  
 ", name='" + name + '\'' +  
 ", salary=" + salary +  
 ", permanent=" + permanent +  
 ", dateOfBirth=" + dateOfBirth +  
 ", department=" + department +  
 ", skills=" + skillList +  
 '}';  
 }  
}

**Skill.java**

package com.cognizant.employee.model;  
  
import jakarta.persistence.\*;  
import java.util.Set;  
  
@Entity  
@Table(name = "skill")  
public class Skill {  
  
 @Id  
 @GeneratedValue(strategy = GenerationType.*IDENTITY*)  
 private int id;  
  
 @Column(name = "sk\_name")  
 private String name;  
  
 @ManyToMany(mappedBy = "skillList")  
 private Set<Employee> employeeList;  
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 Set<Employee> getEmployeeList() { return employeeList; }  
 public void setEmployeeList(Set<Employee> employeeList) { this.employeeList = employeeList; }  
  
 @Override  
 public String toString() {  
 return "Skill{" +  
 "id=" + id +  
 ", name='" + name + '\'' +  
 '}';  
 }  
}

**DepartmentRepository.java**

package com.cognizant.employee.repository;  
  
import com.cognizant.employee.model.Department;  
import org.springframework.data.jpa.repository.JpaRepository;  
  
public interface DepartmentRepository extends JpaRepository<Department, Integer> {  
}

**EmployeeRepository.java**

package com.cognizant.employee.repository;  
  
import com.cognizant.employee.model.Employee;  
import org.springframework.data.jpa.repository.JpaRepository;  
  
public interface EmployeeRepository extends JpaRepository<Employee, Integer> {  
}

**SkillRepository.java**

package com.cognizant.employee.repository;  
  
import com.cognizant.employee.model.Skill;  
import org.springframework.data.jpa.repository.JpaRepository;  
  
public interface SkillRepository extends JpaRepository<Skill, Integer> {  
}

**EmployeeApplication.java**

package com.cognizant.employee;  
  
import org.springframework.boot.CommandLineRunner;  
import org.springframework.boot.SpringApplication;  
import org.springframework.boot.autoconfigure.SpringBootApplication;  
  
@SpringBootApplication  
public class EmployeeApplication implements CommandLineRunner {  
  
 public static void main(String[] args) {  
 SpringApplication.*run*(EmployeeApplication.class, args);  
 }  
  
 @Override  
 public void run(String... args) throws Exception {  
 System.*out*.println("Application started successfully!");  
 }  
}

**Output**

