

Skill.java:

```
package com.cognizant.spring_learn.model;

public class Skill {

    private String name;

    public Skill() {

    }

    public Skill(String name) {

        this.name = name;

    }

    public String getName() {

        return name;

    }

    public void setName(String name) {

        this.name = name;

    }

    public String toString() {

        return "Skill{name='" + name + "'}";

    }

}
```

Employee.java:

```
package com.cognizant.spring_learn.model;

import java.util.Date;

import java.util.List;

public class Employee {

    private int id;

    private String name;

    private double salary;

    private boolean permanent;

    private Date dateOfBirth;

    private Department department;

    private List<Skill> skillList;
```

```
public Employee() {  
    }  
  
    public Employee(int id, String name, double salary, boolean permanent, Date dateOfBirth,  
Department department, List<Skill> skillList) {  
  
        this.id = id;  
  
        this.name = name;  
  
        this.salary = salary;  
  
        this.permanent = permanent;  
  
        this.dateOfBirth = dateOfBirth;  
  
        this.department = department;  
  
        this.skillList = 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 List<Skill> getSkillList() {
        return skillList;
    }

    public void setSkillList(List<Skill> skillList) {
        this.skillList = skillList;
    }

    public String toString() {
        return "Employee{" +
            "id=" + id +
            ", name=\"" + name + "\"" +
            ", salary=" + salary +
            ", permanent=" + permanent +
            ", dateOfBirth=" + dateOfBirth +
            ", department=" + department +

```

```

        ", skillList=" + skillList +
    '};
}
}

```

Department.java:

```

package com.cognizant.spring_learn.model;

public class Department {

    private int id;

    private String name;

    public Department() {

    }

    public Department(int id, String name) {

        this.id = id;

        this.name = name;

    }

    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 toString() {

        return "Department{id=" + id + ", name=" + name + "}";

    }

}

```

EmployeeDao.java:

```
package com.cognizant.spring_learn.dao;

import com.cognizant.spring_learn.model.Employee;
import org.springframework.context.ApplicationContext;
import org.springframework.context.support.ClassPathXmlApplicationContext;

public class EmployeeDao {

    public static void main(String[] args) {

        ApplicationContext context = new ClassPathXmlApplicationContext("employee.xml");

        Employee employee = (Employee) context.getBean("employee");

        System.out.println("Employee Details:");

        System.out.println(employee);

    } }
```

Employee.xml:

```
<?xml version="1.0" encoding="UTF-8"?>

<beans xmlns="http://www.springframework.org/schema/beans"
       xmlns:ctx="http://www.springframework.org/schema/context"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xsi:schemaLocation="
           http://www.springframework.org/schema/beans
           https://www.springframework.org/schema/beans/spring-beans.xsd
           http://www.springframework.org/schema/context
           https://www.springframework.org/schema/context/spring-context.xsd">

    <bean id="department" class="com.cognizant.spring_learn.model.Department">
        <property name="id" value="1"/>
        <property name="name" value="Human Resources"/>
    </bean>

    <bean id="skill1" class="com.cognizant.spring_learn.model.Skill">
        <property name="name" value="Java"/>
    </bean>

    <bean id="skill2" class="com.cognizant.spring_learn.model.Skill">
        <property name="name" value="MySQL"/>
    </bean>
</beans>
```

```

</bean>

<bean id="employee" class="com.cognizant.spring_learn.model.Employee">

    <property name="id" value="101"/>

    <property name="name" value="Sindhuja"/>

    <property name="salary" value="50000"/>

    <property name="permanent" value="true"/>

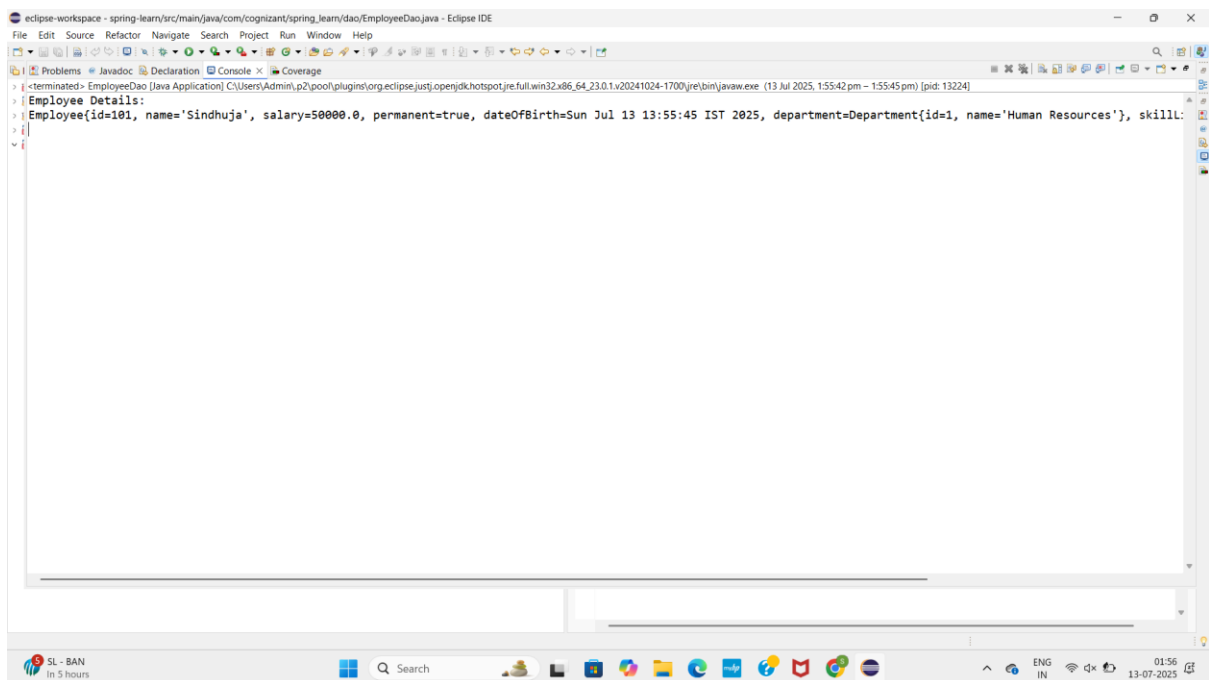
    <property name="dateOfBirth">
        <bean class="java.util.Date"/>
    </property>

    <property name="department" ref="department"/>

    <property name="skillList">
        <list><ref bean="skill1"/>
        <ref bean="skill2"/> </list>
    </property>
</bean>
</beans>

```

OUTPUT:



Build REST controller to return the employee data:

REST Controller to Return Static Employee Data:

```

package com.cognizant.spring_learn.controller;

import com.cognizant.spring_learn.model.Employee;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

import org.springframework.web.bind.annotation.GetMapping;

import org.springframework.web.bind.annotation.RestController;

@RestController

public class EmployeeController {

    @GetMapping("/employee")

    public Employee getEmployee() {

        ApplicationContext context = new ClassPathXmlApplicationContext("employee.xml");

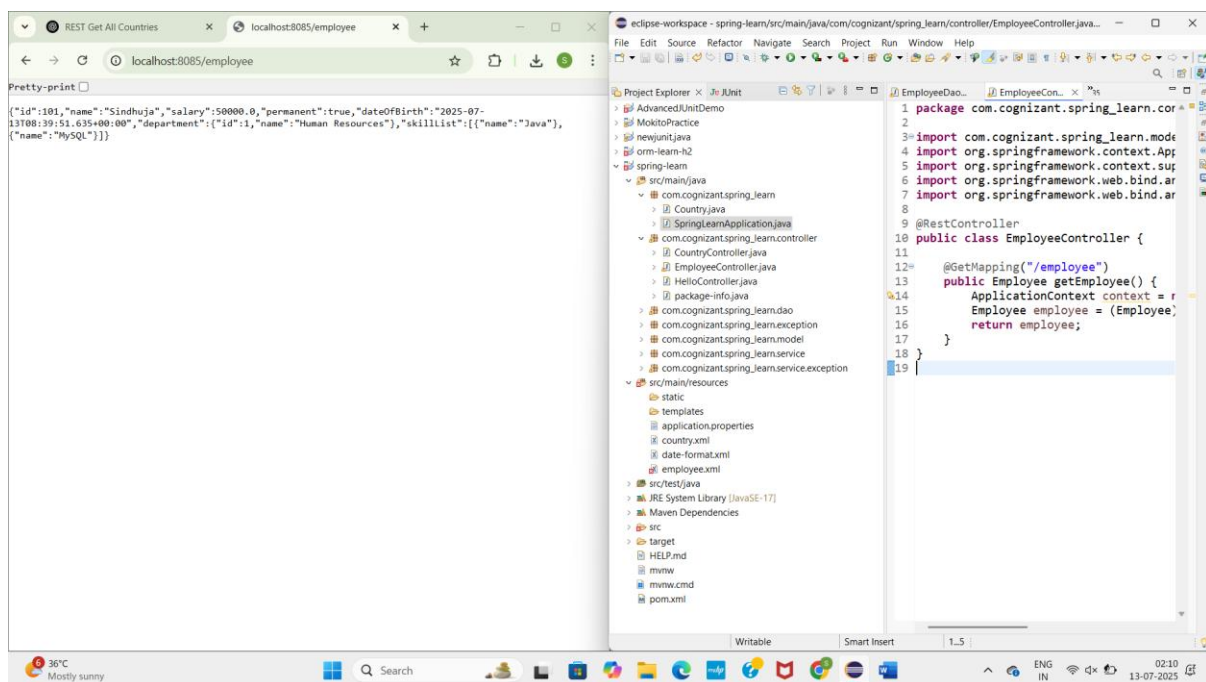
        Employee employee = (Employee) context.getBean("employee");

        return employee;

    } }

```

OUTPUT:



Create a REST controller to return Department data:

```

package com.cognizant.spring_learn.controller;

import com.cognizant.spring_learn.model.Department;

import org.springframework.context.ApplicationContext;

```

```

import org.springframework.context.support.ClassPathXmlApplicationContext;

import org.springframework.web.bind.annotation.GetMapping;

import org.springframework.web.bind.annotation.RestController;

@RestController

public class DepartmentController {

    @GetMapping("/department")

    public Department getDepartment() {

        ApplicationContext context = new ClassPathXmlApplicationContext("employee.xml");

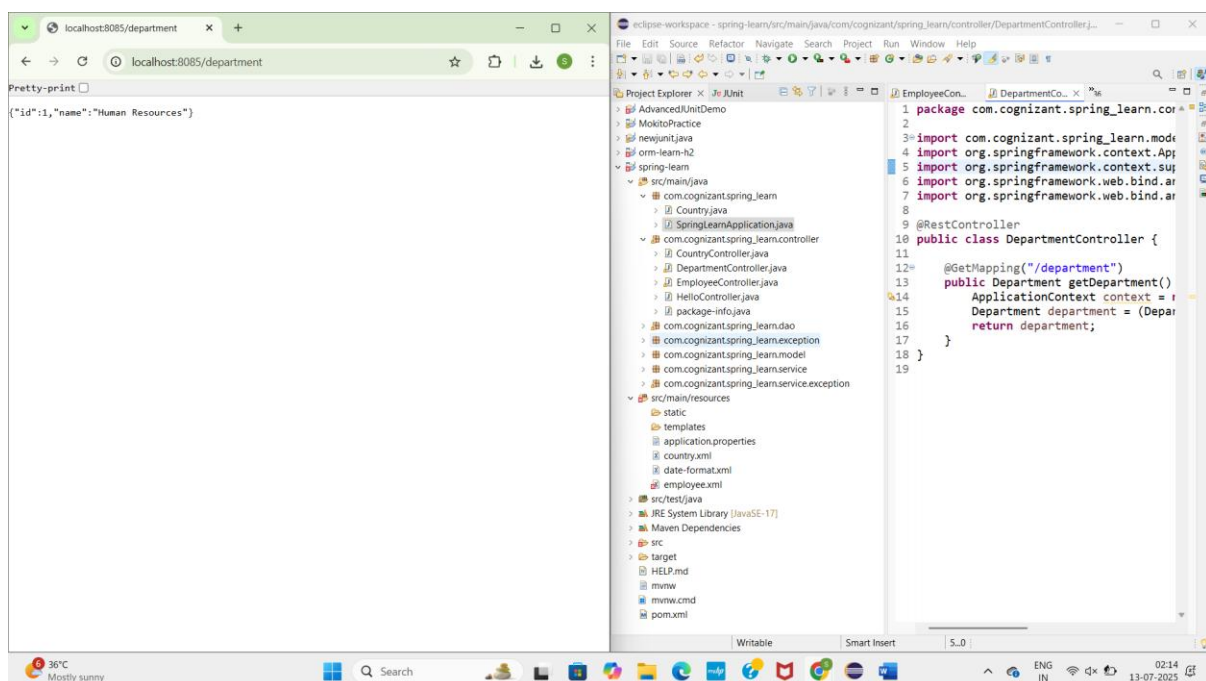
        Department department = (Department) context.getBean("department");

        return department;

    } }

```

OUTPUT:



REST controller to return Skill list:

```

package com.cognizant.spring_learn.controller;

import com.cognizant.spring_learn.model.Employee;
import com.cognizant.spring_learn.model.Skill;

import org.springframework.context.ApplicationContext;
import org.springframework.context.support.ClassPathXmlApplicationContext;
import org.springframework.web.bind.annotation.GetMapping;

```



```

import org.springframework.web.bind.annotation.RestController;

import java.util.List;

@RestController

public class SkillController {

    @GetMapping("/skills")

    public List<Skill> getSkills() {

        ApplicationContext context = new ClassPathXmlApplicationContext("employee.xml");

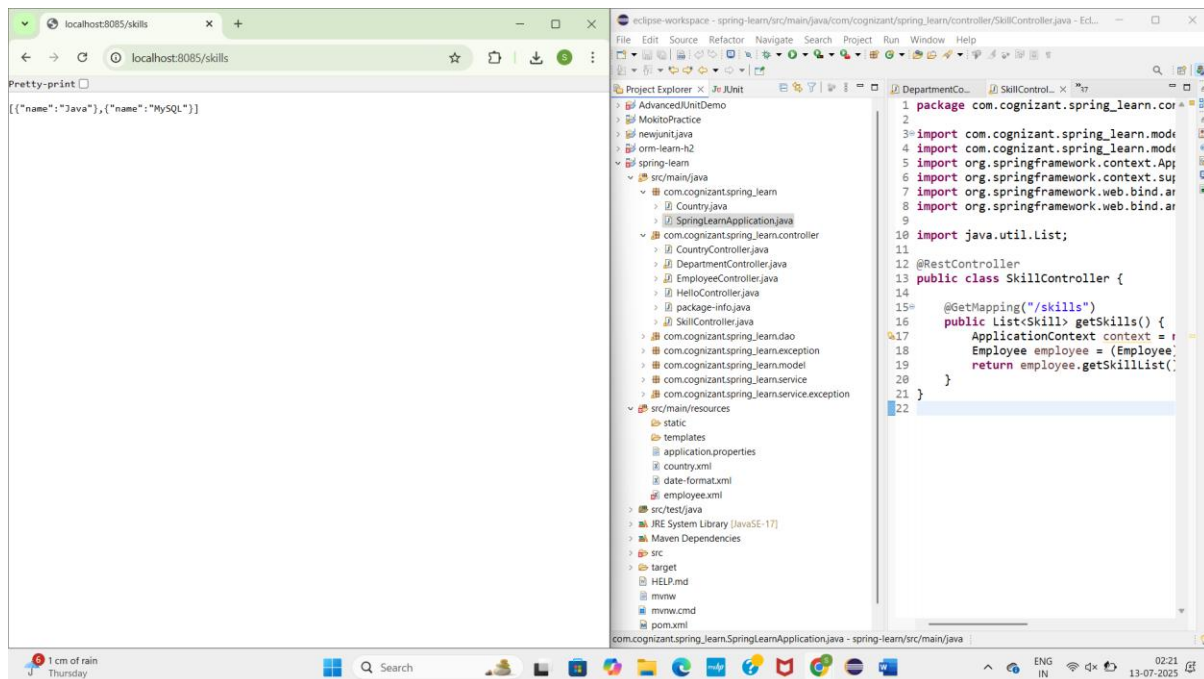
        Employee employee = (Employee) context.getBean("employee");

        return employee.getSkillList();

    } }

```

OUTPUT:



Create a REST controller to return all employee details from hardcoded list:

EmployeeListController.java:

```

package com.cognizant.spring_learn.controller;

import com.cognizant.spring_learn.model.Department;
import com.cognizant.spring_learn.model.Employee;
import com.cognizant.spring_learn.model.Skill;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RestController;

```

```

import java.util.Arrays;

import java.util.Date;

import java.util.List;

@RestController

public class EmployeeListController {

    @GetMapping("/employees")

    public List<Employee> getAllEmployees() {

        Department dept = new Department(1, "HR");

        Skill skill1 = new Skill("Java");

        Skill skill2 = new Skill("MySQL");

        Employee emp1 = new Employee(201, "Sindhu", 70000, true, new Date(), dept,
Arrays.asList(skill1));

        Employee emp2 = new Employee(202, "Ram", 60000, false, new Date(), dept,
Arrays.asList(skill2));

        Employee emp3 = new Employee(203, "Priya", 80000, true, new Date(), dept, Arrays.asList(skill1,
skill2));

        return Arrays.asList(emp1, emp2, emp3);

    }
}

```

OUTPUT:

