

Spring Data JPA with Hibernate Part 2

- Instructions for JPQL and Native SQL Query
 - Create an employeeTable table with the following fields: empId, empFirstName, empLastName, empSalary, empAge.

```
mysql> use SpringDataJPA2;
```

```
Database changed
```

```
mysql> show tables;
```

```
Empty set (0.00 sec)
```

```
mysql> create table employeetable(  
-> empid int PRIMARY KEY AUTO_INCREMENT,  
-> empfirstname varchar(20),  
-> emplastname varchar(20),  
-> empsalary double,  
-> empage int  
-> );
```

```
Query OK, 0 rows affected (0.04 sec)
```

```
mysql> desc employeetable;
```

| Field | Type | Null | Key | Default | Extra |
|--------------|-------------|------|-----|---------|----------------|
| empid | int(11) | NO | PRI | NULL | auto_increment |
| empfirstname | varchar(20) | YES | | NULL | |
| emplastname | varchar(20) | YES | | NULL | |
| empsalary | double | YES | | NULL | |
| empage | int(11) | YES | | NULL | |

```
5 rows in set (0.00 sec)
```

```
mysql> 
```

- **Create an Employee entity having following fields: id, firstName, lastName, salary, age which maps to the table columns given in above.**

CODE

```
package com.SpringData.SpringDataJPA2_Assignment2.entity;
```

```
import javax.persistence.*;
```

```
@Entity
```

```
@Table(name = "employeetable")
```

```
public class Employee {
```

```
    @Id
```

```
    @GeneratedValue(strategy = GenerationType.IDENTITY)
```

```
    @Column(name = "empid")
```

```
    private Integer id;
```

```
    @Column(name = "empfirstname")
```

```
    private String firstName;
```

```
    @Column(name = "emplastname")
```

```
    private String lastName;
```

```
    @Column(name = "empsalary")
```

```
    private Double salary;
```

```
    @Column(name = "empage")
```

```
    private Integer age;
```

```
    public Integer getId() {
```

```
        return id;
```

```
    }
```

```
    public void setId(Integer id) {
```

```
        this.id = id;
```

```
    }
```

```
    public String getFirstName() {
```

```
        return firstName;
```

```
    }
```

```
    public void setFirstName(String firstName) {
```

```
        this.firstName = firstName;
```

```
    }
```

```
public String getLastName() {  
    return lastName;  
}
```

```
public void setLastName(String lastName) {  
    this.lastName = lastName;  
}
```

```
public Double getSalary() {  
    return salary;  
}
```

```
public void setSalary(Double salary) {  
    this.salary = salary;  
}
```

```
public Integer getAge() {  
    return age;  
}
```

```
public void setAge(Integer age) {  
    this.age = age;  
}
```

```
@Override
```

```
public String toString() {  
    return "Employee{" +  
        "id=" + id +  
        ", firstName=" + firstName + "\" +  
        ", lastName=" + lastName + "\" +  
        ", salary=" + salary +  
        ", age=" + age +  
        "}";  
}
```

```
mysql> use SpringDataJPA2;
Database changed
mysql> show tables;
+-----+
| Tables_in_SpringDataJPA2 |
+-----+
| employeetable             |
+-----+
1 row in set (0.00 sec)

mysql> desc employeetable;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| empid          | int(11)       | NO   | PRI | NULL    | auto_increment |
| empfirstname   | varchar(20)   | YES  |     | NULL    |                |
| emplastname    | varchar(20)   | YES  |     | NULL    |                |
| empsalary      | double        | YES  |     | NULL    |                |
| empage         | int(11)       | YES  |     | NULL    |                |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> 
```

JPQL:

1. Display the first name, last name of all employees having salary greater than average salary ordered in ascending by their age and in descending by their salary.

CODE

EmployeeRepository.java

```
@Repository
public interface EmployeeRepository extends CrudRepository<Employee,Integer> {
    //Display the first name, last name of all employees having salary greater than average salary
    ordered in ascending by their age and in descending by their salary.

    @Query("select firstName, lastName from Employee " +
            "where salary > (select AVG(salary) from Employee) " +
            "Order By age ASC,salary DESC ")
    List<Object[]> findAllEmployeePartialData();
}
```

EmployeeService.java

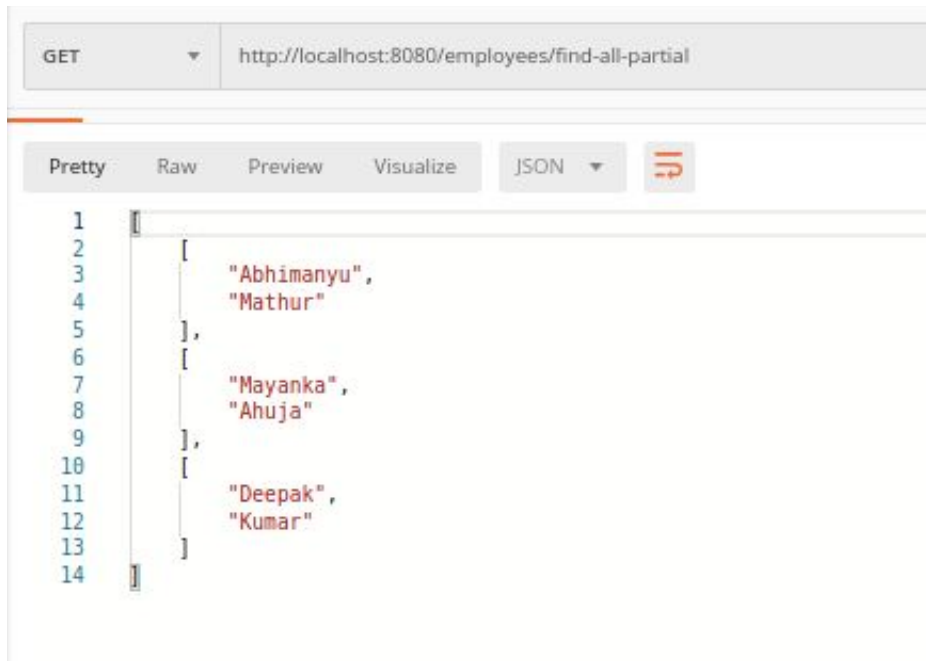
```
//PARTIAL DATA
public List<Object[]> findAllEmployeePartial() {
    List<Object[]> employeeList = employeeRepository.findAllEmployeePartialData();
    return employeeList;
}
```

EmployeeController.java

```
@GetMapping("/find-all-partial")
public List<Object[]> findEmployeesPartialData()
{
    List<Object[]> employees = employeeService.findAllEmployeePartial();
    return employees;
}
```

OUTPUT

```
mysql> select * from employeetable;
+-----+-----+-----+-----+-----+
| empid | empfirstname | emplastname | empsalary | empage |
+-----+-----+-----+-----+-----+
| 1 | Mayanka | Ahuja | 95000 | 33 |
| 2 | Aayushi | Thani | 55000 | 25 |
| 3 | Simran | Verma | 35000 | 28 |
| 4 | Deepak | Kumar | 80000 | 55 |
| 5 | Shashi | Sharma | 60000 | 45 |
| 6 | Pragya | Jain | 45000 | 23 |
| 7 | Abhimanyu | Mathur | 70000 | 23 |
+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```



2. Update salary of all employees by a salary passed as a parameter whose existing salary is less than the average salary.

CODE

EmployeeController.java

```
@GetMapping("/update/{increment}")
public String updateEmployeeSalary(@PathVariable Double increment)
{
    employeeService.updateEmployee(increment);
    return "Result Updated";
}
```

EmployeeService.java

```
//UPDATE THE EMPLOYEE SALARY
public void updateEmployee(Double increment){
    Iterable<Employee> list = employeeRepository.findAll();
    Iterator<Employee> iterator = list.iterator();
    Double sum =0d;
    int count =0;
    while (iterator.hasNext())
    {
        Employee e = iterator.next();
        sum = sum + e.getSalary();
        count++;
    }
}
```

```

    }
    Double average = sum/count;
    employeeRepository.updateAllEmployeeSalary(increment,average);
}

```

EmployeeRepository.java

//Update salary of all employees by a salary passed as a parameter whose existing salary is less than the average salary.

@Modifying

@Transactional

@Query("update Employee SET salary=salary+:increment WHERE salary<:average")

void updateAllEmployeeSalary(@Param("increment") Double increment,@Param("average") Double average);

OUTPUT

```

mysql> select * from employeetable;
+-----+-----+-----+-----+-----+
| empid | empfirstname | emplastname | empsalary | empage |
+-----+-----+-----+-----+-----+
|      1 | Mayanka      | Ahuja       | 95000     | 33     |
|      2 | Aayushi      | Thani       | 55000     | 25     |
|      5 | Shashi       | Sharma      | 60000     | 45     |
|      6 | Pragya       | Jain        | 45000     | 23     |
|      7 | Abhimanyu    | Mathur      | 70000     | 23     |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> select * from employeetable;
+-----+-----+-----+-----+-----+
| empid | empfirstname | emplastname | empsalary | empage |
+-----+-----+-----+-----+-----+
|      1 | Mayanka      | Ahuja       | 95000     | 33     |
|      2 | Aayushi      | Thani       | 55500     | 25     |
|      5 | Shashi       | Sharma      | 60500     | 45     |
|      6 | Pragya       | Jain        | 45500     | 23     |
|      7 | Abhimanyu    | Mathur      | 70000     | 23     |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

```


3. Delete all employees with minimum salary.

CODE

EmployeeController.java

```
@GetMapping("/delete/{salary}")
public String deleteEmployee(@PathVariable Double salary){
    employeeService.deleteEmployee(salary);
    return "Employee With Minimum Salary Deleted";
}
```

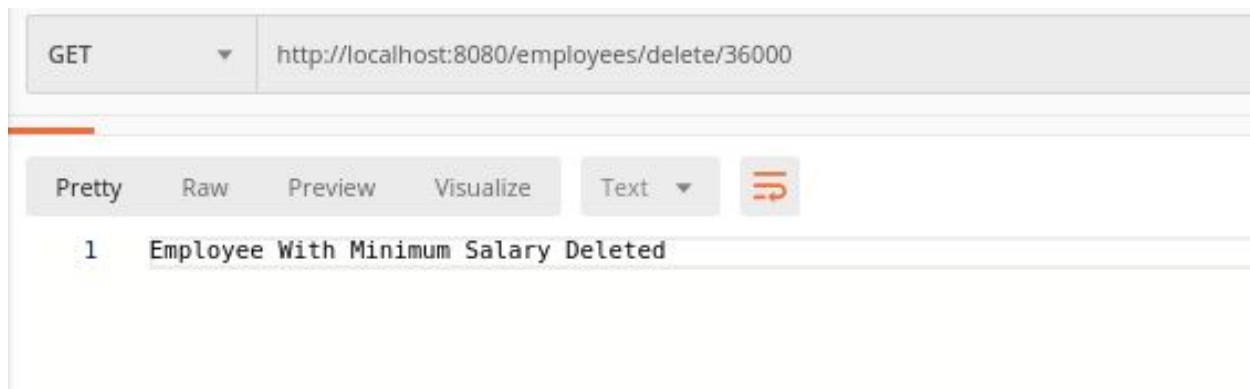
EmployeeService.java

```
//DELETE THE EMPLOYEE WITH MINIMUM SALARY
public void deleteEmployee(Double salary){
    employeeRepository.deleteAllEmployeesMinSalary(salary);
}
```

EmployeeRepository.java

```
//Delete all employees with minimum salary.
@Transactional
@Query("delete from Employee where salary<:minsalary")
void deleteAllEmployeesMinSalary(@Param("minsalary") Double minSalary);
```

OUTPUT




```
File Edit View Search Terminal Help
mysql> select * from employeetable;
+-----+-----+-----+-----+-----+
| empid | empfirstname | emplastname | empsalary | empage |
+-----+-----+-----+-----+-----+
|      1 | Mayanka      | Ahuja       | 95000     | 33      |
|      2 | Aayushi      | Thani       | 55000     | 25      |
|      3 | Simran       | Verma       | 35000     | 28      |
|      4 | Deepak       | Kumar       | 80000     | 55      |
|      5 | Shashi       | Sharma      | 60000     | 45      |
|      6 | Pragya       | Jain        | 45000     | 23      |
|      7 | Abhimanyu    | Mathur      | 70000     | 23      |
|      8 | Rajiv        | singh       | 90000     | 57      |
+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)

mysql> select * from employeetable;
+-----+-----+-----+-----+-----+
| empid | empfirstname | emplastname | empsalary | empage |
+-----+-----+-----+-----+-----+
|      1 | Mayanka      | Ahuja       | 95000     | 33      |
|      2 | Aayushi      | Thani       | 55000     | 25      |
|      4 | Deepak       | Kumar       | 80000     | 55      |
|      5 | Shashi       | Sharma      | 60000     | 45      |
|      6 | Pragya       | Jain        | 45000     | 23      |
|      7 | Abhimanyu    | Mathur      | 70000     | 23      |
|      8 | Rajiv        | singh       | 90000     | 57      |
+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```

Native SQL Query:

1. Display the id, first name, age of all employees where last name ends with "singh".

CODE

EmployeeController.java

```
@GetMapping("/last-name")
public List<Employee> findEmployeeLastNameNQ()
{
```

```

List<Employee> employee = employeeService.findEmployeeLastName();
return employee;
}

```

EmployeeService.java

//Native SQL Query - Display the id, first name, age of all employees where last name ends with "singh"

```

public List<Employee> findEmployeeLastName()
{
    List<Employee> lastNameNQ= employeeRepository.findEmployeeLastNameNQ("singh");
    return lastNameNQ;
}

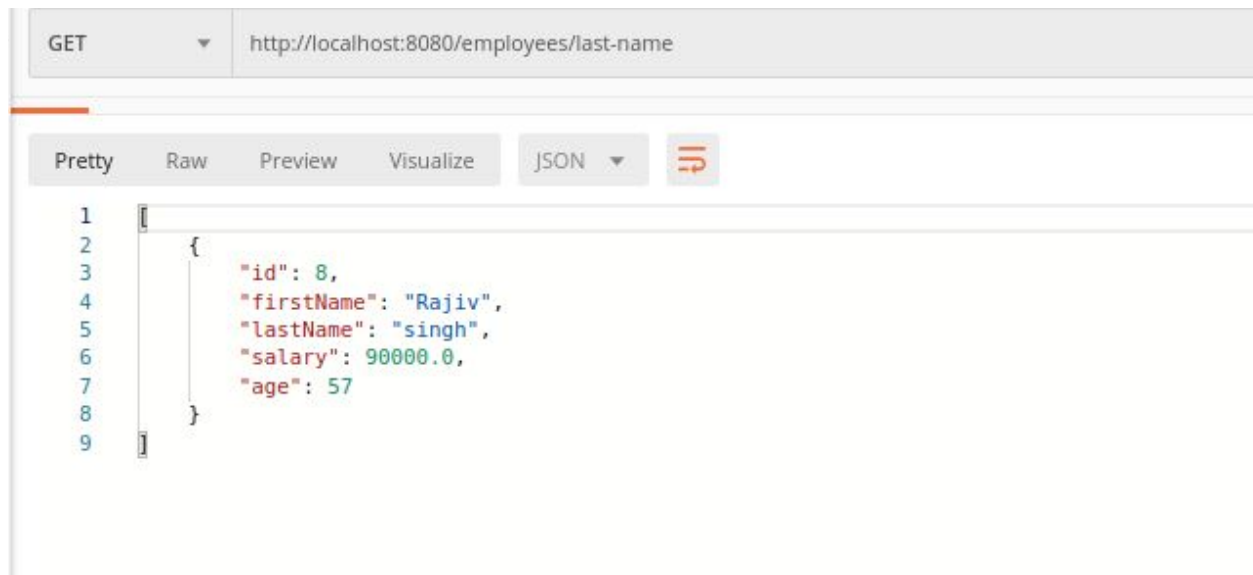
```

EmployeeRepository.java

@Query(value = "select * from employeetable where emplastname=:lastname", nativeQuery = true)

List<Employee> findEmployeeLastNameNQ(@Param("lastname") String lastname);

OUTPUT



2. Delete all employees with age greater than 45(Should be passed as a parameter)

CODE

EmployeeController.java

```

@GetMapping("/delete-greater-than-45")
public String deleteEmployeeGreaterThan45()
{
    employeeService.deleteEmployeeGreaterThan45();
    return "Deleted Employee Records Greater Than 45";
}

```

EmployeeService.java

```

//Native SQL Query - Delete all employees with age greater than 45(Should be passed as a
parameter)
public void deleteEmployeeGreaterThan45()
{
    employeeRepository.deleteEmployeeGreaterThan45(45);
}

```

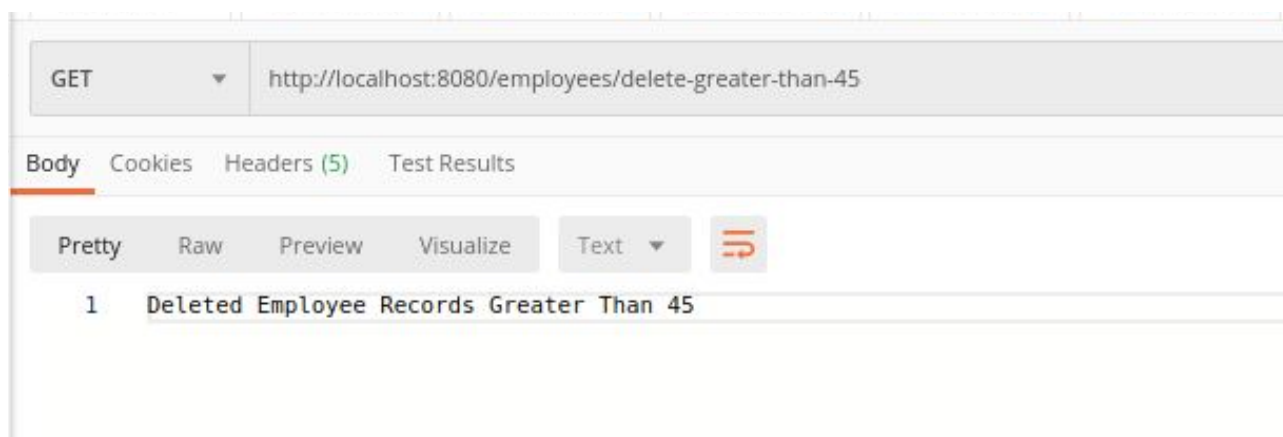
EmployeeRepository.java

```

//Delete all employees with age greater than 45(Should be passed as a parameter)
@Modifying
@Transactional
@Query(value = "delete from employeetable where empage>:age", nativeQuery = true)
void deleteEmployeeGreaterThan45(@Param("age") Integer age);

```

OUTPUT



```
mysql> select * from employeetable;
```

| empid | empfirstname | emplastname | empsalary | empage |
|-------|--------------|-------------|-----------|--------|
| 1 | Mayanka | Ahuja | 95000 | 33 |
| 2 | Aayushi | Thani | 55000 | 25 |
| 4 | Deepak | Kumar | 80000 | 55 |
| 5 | Shashi | Sharma | 60000 | 45 |
| 6 | Pragya | Jain | 45000 | 23 |
| 7 | Abhimanyu | Mathur | 70000 | 23 |
| 8 | Rajiv | singh | 90000 | 57 |

```
7 rows in set (0.00 sec)
```



```
mysql> select * from employeetable;
```

| empid | empfirstname | emplastname | empsalary | empage |
|-------|--------------|-------------|-----------|--------|
| 1 | Mayanka | Ahuja | 95000 | 33 |
| 2 | Aayushi | Thani | 55000 | 25 |
| 5 | Shashi | Sharma | 60000 | 45 |
| 6 | Pragya | Jain | 45000 | 23 |
| 7 | Abhimanyu | Mathur | 70000 | 23 |

```
5 rows in set (0.00 sec)
```

Inheritance Mapping:

1. Implement and demonstrate Single Table strategy.

CODE

Payment.java

```
@Entity
@Inheritance(strategy = InheritanceType.SINGLE_TABLE)
@DiscriminatorColumn(name = "pmode",discriminatorType =
DiscriminatorType.STRING)
public abstract class Payment {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    private double amount;

    public int getId() {
        return id;
    }
}
```

```

    }

    public void setId(int id) {
        this.id = id;
    }

    public double getAmount() {
        return amount;
    }

    public void setAmount(double amount) {
        this.amount = amount;
    }
}

```

Check.java

```

@Entity
@DiscriminatorValue("ch")
public class Check extends Payment {
    private String checknumber;

    public String getChecknumber() {
        return checknumber;
    }

    public void setChecknumber(String checknumber) {
        this.checknumber = checknumber;
    }
}

```

CreditCard.java

```

@Entity
@DiscriminatorValue("cc")
public class CreditCard extends Payment {
    private String cardnumber;

    public String getCardnumber() {
        return cardnumber;
    }

    public void setCardnumber(String cardnumber) {
        this.cardnumber = cardnumber;
    }
}

```

```
}  
}
```

PaymentController.java

```
@RestController  
@RequestMapping("/payments")  
public class PaymentController {  
  
    @Autowired  
    PaymentService paymentService;  
  
    @PostMapping("/credit-card")  
    public Payment createCreditCardPayment(@RequestBody CreditCard creditCard)  
    {  
        return paymentService.createPayment(creditCard);  
    }  
  
    @PostMapping("/check")  
    public Payment createCheckPayment(@RequestBody Check check)  
    {  
        return paymentService.createCheckPayment(check);  
    }  
  
}
```

PaymentService.java

```
@Service  
public class PaymentService {  
  
    @Autowired  
    PaymentRepository paymentRepository;  
  
    public Payment createPayment(CreditCard creditCard)  
    {  
        return paymentRepository.save(creditCard);  
    }  
  
    public Payment createCheckPayment(Check check)  
    {  
        return paymentRepository.save(check);  
    }  
  
}
```

```
}
```

PaymentRepository.java

```
public interface PaymentRepository extends CrudRepository<Payment,Integer> {  
  
}
```

OUTPUT

The screenshot displays a REST client interface with a POST request to `http://localhost:8080/payments/check`. The request body is a JSON object: `{ "amount": 4000.0, "checknumber": "87399638234" }`. The response body is a JSON object: `{ "id": 2, "amount": 4000.0, "checknumber": "87399638234" }`.

Request Details:

- Method: POST
- URL: `http://localhost:8080/payments/check`
- Body Type: raw
- Body Content:

```
1 {  
2   "amount": 4000.0,  
3   "checknumber": "87399638234"  
4 }
```

Response Details:

- Body Type: Pretty
- Body Content:

```
1 {  
2   "id": 2,  
3   "amount": 4000.0,  
4   "checknumber": "87399638234"  
5 }
```



```
mysql> select * from payment;
+-----+-----+-----+-----+-----+
| pmode | id  | amount | checknumber | cardnumber |
+-----+-----+-----+-----+-----+
| cc    | 1   | 2000   | NULL        | 99999234   |
| ch    | 2   | 4000   | 87399638234 | NULL       |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

2. Implement and demonstrate Table Per Class strategy.

CODE

Payment.java

```
@Entity
@Inheritance(strategy = InheritanceType.TABLE_PER_CLASS)
public abstract class Payment {
    @Id
    @GeneratedValue(strategy = GenerationType.AUTO)
    private int id;
    private double amount;

    public int getId() {
        return id;
    }

    public void setId(int id) {
        this.id = id;
    }

    public double getAmount() {
        return amount;
    }

    public void setAmount(double amount) {
        this.amount = amount;
    }
}
```

Check.java

```
@Entity
@Table(name = "bankcheck")
public class Check extends Payment {
    private String checknumber;

    public String getChecknumber() {
        return checknumber;
    }

    public void setChecknumber(String checknumber) {
        this.checknumber = checknumber;
    }
}
```

CreditCard.java

```
@Entity
public class CreditCard extends Payment {
    private String cardnumber;

    public String getCardnumber() {
        return cardnumber;
    }

    public void setCardnumber(String cardnumber) {
        this.cardnumber = cardnumber;
    }
}
```

PaymentController.java

```
@Autowired
PaymentService paymentService;

@PostMapping("/credit-card")
public Payment createCreditCardPayment(@RequestBody CreditCard creditCard)
{
    return paymentService.createPayment(creditCard);
}
```

```
@PostMapping("/check")
public Payment createCheckPayment(@RequestBody Check check)
{
    return paymentService.createCheckPayment(check);
}
```

OUTPUT

```
mysql> show tables;
+-----+
| Tables_in_SpringDataJPA2 |
+-----+
| bankcheck                 |
| credit_card               |
| employeetable             |
| hibernate_sequence        |
| payment                   |
+-----+
5 rows in set (0.01 sec)

mysql> select * from hibernate_sequence;
+-----+
| next_val |
+-----+
|          1 |
+-----+
```

POST

http://localhost:8080/payments/check

Params

Authorization

Headers (9)

Body

Pre-request Script

Tests

Settings

none

form-data

x-www-form-urlencoded

raw

binary

GraphQL

JSON

1 {

2 "amount": 56000.0,

3 "checknumber": "AA8548483984"

4 }

Body

Cookies

Headers (5)

Test Results

Pretty

Raw

Preview

Visualize

JSON

1 {

2 "id": 2,

3 "amount": 56000.0,

4 "checknumber": "AA8548483984"

5 }

```
mysql> select * from hibernate_sequence;
```

```
+-----+  
| next_val |  
+-----+
```

```
|      3 |  
+-----+
```

```
1 row in set (0.01 sec)
```

```
mysql> select * from credit_card;
```

```
+-----+-----+-----+  
| id | amount | cardnumber |  
+-----+-----+-----+
```

```
| 1 | 4000 | 8887638234 |  
+-----+-----+-----+
```

```
1 row in set (0.00 sec)
```

```
mysql> select * from bankcheck;
```

```
+-----+-----+-----+  
| id | amount | checknumber |  
+-----+-----+-----+
```

```
| 2 | 56000 | AA8548483984 |  
+-----+-----+-----+
```

```
1 row in set (0.00 sec)
```

```
mysql> 
```

3. Implement and demonstrate Joined strategy.

CODE

Payment.java

@Entity

@Inheritance(strategy = InheritanceType.JOINED)

public abstract class Payment {

 @Id

 @GeneratedValue(strategy = GenerationType.AUTO)

 private int id;

```

private double amount;

public int getId() {
    return id;
}

public void setId(int id) {
    this.id = id;
}

public double getAmount() {
    return amount;
}

public void setAmount(double amount) {
    this.amount = amount;
}
}

```

Check.java

```

@Entity
@PrimaryKeyJoinColumn(name = "id")
@Table(name = "bankcheck")
public class Check extends Payment {
    private String checknumber;

    public String getChecknumber() {
        return checknumber;
    }

    public void setChecknumber(String checknumber) {
        this.checknumber = checknumber;
    }
}

```

CreditCard.java

```

@Entity
//@DiscriminatorValue("cc")
@PrimaryKeyJoinColumn(name = "id")
public class CreditCard extends Payment {

```

```
private String cardnumber;

public String getCardnumber() {
    return cardnumber;
}

public void setCardnumber(String cardnumber) {
    this.cardnumber = cardnumber;
}
}
```

OUTPUT

```
mysql> show tables;
+-----+
| Tables_in_SpringDataJPA2 |
+-----+
| employeetable             |
+-----+
1 row in set (0.00 sec)
```

The screenshot displays a REST client interface with a POST request to `http://localhost:8080/payments/credit-card`. The request body is a JSON object: `{ "amount": 4000.0, "cardnumber": "8887638234" }`. The response body is also a JSON object: `{ "id": 1, "amount": 4000.0, "cardnumber": "8887638234" }`.

Request Details:

- Method: POST
- URL: `http://localhost:8080/payments/credit-card`
- Body Type: JSON
- Body Content:

```
{
  "amount": 4000.0,
  "cardnumber": "8887638234"
}
```

Response Details:

- Body Type: JSON
- Body Content:

```
{
  "id": 1,
  "amount": 4000.0,
  "cardnumber": "8887638234"
}
```


POST

http://localhost:8080/payments/check

Params

Authorization

Headers (9)

Body

Pre-request Script

Tests

Settings

none

form-data

x-www-form-urlencoded

raw

binary

GraphQL

JSON

1 {

2 "amount": 56000.0,

3 "checknumber": "AA8548483984"

4 }

Body

Cookies

Headers (5)

Test Results

Pretty

Raw

Preview

Visualize

JSON

1 {

2 "id": 2,

3 "amount": 56000.0,

4 "checknumber": "AA8548483984"

5 }

```
mysql> select * from payment;
+-----+-----+
| id | amount |
+-----+-----+
| 1 | 4000 |
| 2 | 56000 |
+-----+-----+
2 rows in set (0.00 sec)

mysql> select * from credit_card;
+-----+-----+
| cardnumber | id |
+-----+-----+
| 8887638234 | 1 |
+-----+-----+
1 row in set (0.00 sec)

mysql> select * from bankcheck;
+-----+-----+
| checknumber | id |
+-----+-----+
| AA8548483984 | 2 |
+-----+-----+
1 row in set (0.00 sec)

mysql> 
```

Component Mapping:

1. Implement and demonstrate Embedded mapping using employee table having following fields: id, firstName, lastName, age, basicSalary, bonusSalary, taxAmount, specialAllowanceSalary.

CODE

Employee.java

```
@Entity
@Table(name = "employeemapping")
public class EmployeeMapping {

    @Id
    @GeneratedValue(strategy = GenerationType.AUTO)
    private Integer id;
    private String firstname;
    private String lastname;
    private Integer age;
    @Embedded
    private Salary salary;

    public Integer getId() {
        return id;
    }

    public void setId(Integer id) {
        this.id = id;
    }

    public String getFirstname() {
        return firstname;
    }

    public void setFirstname(String firstname) {
        this.firstname = firstname;
    }

    public String getLastname() {
        return lastname;
    }

    public void setLastname(String lastname) {
        this.lastname = lastname;
    }

    public Integer getAge() {
        return age;
    }
}
```

```
public void setAge(Integer age) {  
    this.age = age;  
}  
  
public Salary getSalary() {  
    return salary;  
}  
  
public void setSalary(Salary salary) {  
    this.salary = salary;  
}  
}
```

Salary.java

@Embeddable

```
public class Salary {  
  
    private Integer basicsalary;  
    private Integer bonussalary;  
    private Integer taxamount;  
    private Integer specialallowancesalary;  
  
    public Integer getBasicsalary() {  
        return basicsalary;  
    }  
  
    public void setBasicsalary(Integer basicsalary) {  
        this.basicsalary = basicsalary;  
    }  
  
    public Integer getBonussalary() {  
        return bonussalary;  
    }  
  
    public void setBonussalary(Integer bonussalary) {  
        this.bonussalary = bonussalary;  
    }  
  
    public Integer getTaxamount() {  
        return taxamount;  
    }  
  
    public void setTaxamount(Integer taxamount) {
```

```

        this.taxamount = taxamount;
    }

    public Integer getSpecialallowancesalary() {
        return specialallowancesalary;
    }

    public void setSpecialallowancesalary(Integer specialallowancesalary) {
        this.specialallowancesalary = specialallowancesalary;
    }
}

```

EmployeeController.java

```

@RestController
@RequestMapping("/employeesmapping")
public class EmployeeControllerMapping {

    @Autowired
    EmployeeServiceMapping employeeService;

    @PostMapping("/create")
    public String employeeCreate()
    {
        employeeService.employeeCreate();
        return "User Added";
    }

    @GetMapping("/find-all")
    public List<EmployeeMapping> findAllEmployee()
    {
        List<EmployeeMapping> employees = employeeService.findAllEmployee();
        return employees;
    }
}

```

EmployeeService.java

```

@Service
public class EmployeeServiceMapping {

```

@Autowired

EmployeeRepositoryMapping employeeRepositoryMapping;

//CREATE A EMPLOYEE

public void employeeCreate()

```
{
    EmployeeMapping employeeMapping = new EmployeeMapping();
    employeeMapping.setFirstname("Aayushi");
    employeeMapping.setLastname("Thani");
    Salary salary = new Salary();
    salary.setBasicsalary(50000);
    salary.setBonussalary(6000);
    salary.setSpecialallowancesalary(3000);
    salary.setTaxamount(5000);
    employeeMapping.setSalary(salary);
    employeeRepositoryMapping.save(employeeMapping);
}
```

//FETCH THE LIST OF ALL EMPLOYEES

public List<EmployeeMapping> findAllEmployee()

```
{
    List<EmployeeMapping> employees = (List<EmployeeMapping>)
employeeRepositoryMapping.findAll();
    return employees;
}
}
```

EmployeeRepository.java

@Repository

public interface EmployeeRepositoryMapping extends

CrudRepository<EmployeeMapping,Integer> {

}

OUTPUT

```
mysql> show tables;
+-----+
| Tables_in_SpringDataJPA2 |
+-----+
| bankcheck                 |
| credit_card               |
| employeetable             |
| payment                   |
+-----+
4 rows in set (0.00 sec)
```

```
mysql> show tables;
+-----+
| Tables_in_SpringDataJPA2 |
+-----+
| bankcheck                 |
| credit_card               |
| employeemapping           |
| employeetable             |
| hibernate_sequence        |
| payment                   |
+-----+
6 rows in set (0.00 sec)
```

```
mysql> desc employeemapping;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id             | int(11)       | NO   | PRI | NULL    |       |
| age            | int(11)       | YES  |     | NULL    |       |
| firstname      | varchar(255)  | YES  |     | NULL    |       |
| lastname       | varchar(255)  | YES  |     | NULL    |       |
| basicsalary    | int(11)       | YES  |     | NULL    |       |
| bonussalary    | int(11)       | YES  |     | NULL    |       |
| specialallowancesalary | int(11)       | YES  |     | NULL    |       |
| taxamount      | int(11)       | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```


Untitled Request


POST ▼ http://localhost:8080/employeesmapping/create

Params Authorization Headers (8) Body Pre-request Script Tests Settings

Query Params

| KEY | VALUE |
|-----|-------|
| Key | Value |

Body Cookies Headers (5) Test Results

Pretty Raw Preview Visualize Text ▼ 

1 User Added

```
mysql> select * from employeeemapping;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+
| id | age | firstname | lastname | basicsalary | bonussalary | specialallowancesalary | taxamount |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | NULL | Aayushi | Thani | 50000 | 6000 | 3000 | 5000 |
+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

GET

http://localhost:8080/employeesmapping/find-all

Params

Authorization

Headers (7)

Body

Pre-request Script

Tests

Query Params

| KEY | VALUE |
|-----|-------|
| Key | Value |

Body

Cookies

Headers (5)

Test Results

Pretty

Raw

Preview

Visualize

JSON



```
1  [
2    {
3      "id": 1,
4      "firstname": "Aayushi",
5      "lastname": "Thani",
6      "age": null,
7      "salary": {
8        "basicsalary": 50000,
9        "bonussalary": 6000,
10       "taxamount": 5000,
11       "specialallowancesalary": 3000
12     }
13   }
14 ]
```