Assisted practice

com.example.test;

```java
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication
public class RestApiOneApplication {

    public static void main(String[] args) {
        SpringApplication.run(RestApiOneApplication.class, args);
    }

}
```

Creating an Entity Class

```java
package com.example.test;

import javax.persistence.Column;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.Id;

@Entity
public class PersonEntity {

    @Id
    @GeneratedValue(strategy = GenerationType.AUTO)
    @Column(name = "id", updatable = false, nullable = false)
    private Integer personId;
    @Column
    private String name;
    @Column
    private Integer age;

    public PersonEntity() {
        super();
    }
    public PersonEntity(Integer personId, String name, Integer age) {
        super();
        this.personId = personId;
        this.name = name;
        this.age = age;
    }
    public Integer getPersonId() {
        return personId;
    }
    public void setPersonId(Integer personId) {
        this.personId = personId;
    }
    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
```

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

Creating a Repository Class

```java
package com.example.test;

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

@Repository

public interface PersonRepository extends JpaRepository<PersonEntity,
Integer> {

}
```

Creating a Service Class

```java
package com.example.test;

import java.util.HashMap;
import java.util.Map;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import org.springframework.web.client.RestTemplate;

@Service
public class PersonService {

    @Autowired
    PersonRepository personRepository;

    RestTemplate restTemplate = new RestTemplate();

    public PersonResonse getPerson(int personId){
        final String uri =
"http://localhost:8082/webapitwo/hobby/{personId}";

        Map<String, Integer> params = new HashMap<String, Integer>();
        params.put("personId", personId);

        String result = restTemplate.getForObject(uri, String.class,
params);
        PersonEntity pe=personRepository.findById(personId).get();
        PersonResonse pr=new PersonResonse();
        pr.setPersonId(pe.getPersonId());
        pr.setName(pe.getName());
        pr.setAge(pe.getAge());
        pr.setHobby(result);

        return pr;
    }
```

```java
    public void addPerson(PersonEntity pe){
        personRepository.save(pe);
    }
}
```

Creating a Controller Class

```java
package com.example.test;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
import org.springframework.web.bind.annotation.RestController;

@RestController
@RequestMapping(path = "/webapione")
public class PersonControlller {

    @Autowired
    PersonService personService;

    @RequestMapping("/person/{personId}")
    public PersonResonse getPerson(@PathVariable int personId){
        return personService.getPerson(personId);
    }

    @RequestMapping(method=RequestMethod.POST, value="/person")
    public void addPerson(@RequestBody PersonEntity pe ) {
        personService.addPerson(pe);
    }
}
```


Creating a Response Class

```java
package com.example.test;

public class PersonResonse {

    private Integer personId;
    private String name;
    private Integer age;
    private String hobby;
    public Integer getPersonId() {
        return personId;
    }
    public void setPersonId(Integer personId) {
        this.personId = personId;
    }
    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
    }
    public Integer getAge() {
        return age;
    }
    public void setAge(Integer age) {
```

```java
            this.age = age;
        }
    public String getHobby() {
        return hobby;
    }
    public void setHobby(String result) {
        this.hobby = result;
    }
}
```

port number
server.port=8081
spring.application.name=RestApiOne

```java
package com.example.test;

import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication
public class RestApiTwoApplication {

    public static void main(String[] args) {
        SpringApplication.run(RestApiTwoApplication.class, args);
    }

}
```

Creating an Entity Class

```java
package com.example.test;

import javax.persistence.Column;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.Id;

@Entity
public class HobbyEntity {

    @Id
    @GeneratedValue(strategy = GenerationType.AUTO)
    @Column(name = "id", updatable = false, nullable = false)
    private Integer id;
    @Column
    private Integer personId;
    @Column
    private String name;

    public HobbyEntity() {
        super();
    }
    public HobbyEntity(Integer personId, String name) {
        super();
        this.personId = personId;
        this.name = name;
    }
    public Integer getPersonId() {
        return personId;
    }
    public void setPersonId(Integer personId) {
```

```java
            this.personId = personId;
        }
    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
    }
}
```

Creating a Repository Class

```java
package com.example.test;

import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.data.jpa.repository.Query;
import org.springframework.stereotype.Repository;

@Repository
public interface HobbyRepository extends JpaRepository<HobbyEntity,
Integer> {

        @Query("SELECT h.name FROM HobbyEntity h WHERE
h.personId=:personId")
        public String findByPersonId(Integer personId);

}
```

Creating a Service Class

```java
package com.example.test;

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

@Service
public class HobbyService {

    @Autowired
    HobbyRepository hobbyRepository;

    public String findByPersonId(int personid){
        return hobbyRepository.findByPersonId(personid);
    }
    public void addHobby(HobbyEntity he){
        hobbyRepository.save(he);
    }
}
```

Creating a Controller Class

```java
package com.example.test;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
import org.springframework.web.bind.annotation.RestController;

@RestController
@RequestMapping(path = "/webapitwo")
```

```
public class HobbyController {

    @Autowired
    HobbyService hobbyService;

    @RequestMapping("/hobby/{personid}")
    public String findByPersonId(@PathVariable int personid){
        return hobbyService.findByPersonId(personid);
    }

    @RequestMapping(method=RequestMethod.POST, value="/hobby")
    public void addHobby(@RequestBody HobbyEntity he ) {
        hobbyService.addHobby(he);
    }

}
```
 port number

```
server.port=8082
spring.application.name=RestApiTwo
```