**2. CRUD OPERATION**

**Controller:**  
package com.example.demo.Controller;

import java.util.\*;

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

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

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

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

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

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

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

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

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

import com.example.demo.Model.Stud1;

import com.example.demo.Repository.StudRepository;

import com.example.demo.Service.StudService;

@RestController

public class StudController {

@Autowired

StudRepository serviceRepository;

@Autowired

StudService service;

@GetMapping("/get")

List<Stud1> getList(){

return serviceRepository.findAll();

}

@PostMapping("/post")

public Stud1 create(@RequestBody Stud1 stu) {

return serviceRepository.save(stu);

}

@PutMapping("/student/{id}")

public Optional<Stud1>putbyid(@PathVariable int id){

return service.putStud(id);

}

@DeleteMapping("/student")

public String delete(@RequestParam int id) {

return service.deleteDetails(id);

}

**Service:**package com.example.demo.Service;

import java.util.List;

import java.util.Optional;

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

import org.springframework.stereotype.Service;

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

import com.example.demo.Model.Stud1;

import com.example.demo.Repository.StudRepository;

@Service

public class StudService {

@Autowired

StudRepository repository;

public Optional<Stud1>getStud(int id){

return repository.findById(id);

}

public Optional<Stud1>putStud(int id){

return repository.findById(id);

}

public String updateDetails(Stud1 stu)

{

repository.save(stu);

return "updated";

}

public String deleteDetails(int id)

{

repository.deleteById(id);

return "deleted";

}

}

**Repository:**

package com.example.demo.Repository;

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

import org.springframework.stereotype.Repository;

import com.example.demo.Model.Stud1;

@Repository

public interface StudRepository extends JpaRepository<Stud1,Integer> {

}

**Model:**package com.example.demo.Model;

import jakarta.persistence.Entity;

import jakarta.persistence.Id;

@Entity

public class Stud1 {

@Id

private int id;

private String studentName ;

private String departmentName;

private String section;

private Long mobile;

private String mailid;

private String address;

public Stud1(int id, String studentName, String departmentName, String section, Long mobile, String mailid,

String address) {

super();

this.id = id;

this.studentName = studentName;

this.departmentName = departmentName;

this.section = section;

this.mobile = mobile;

this.mailid = mailid;

this.address = address;

}

public Stud1() {

super();

// TODO Auto-generated constructor stub

}

public int getId() {

return id;

}

public void setId(int id) {

this.id = id;

}

public String getStudentName() {

return studentName;

}

public void setStudentName(String studentName) {

this.studentName = studentName;

}

public String getDepartmentName() {

return departmentName;

}

public void setDepartmentName(String departmentName) {

this.departmentName = departmentName;

}

public String getSection() {

return section;

}

public void setSection(String section) {

this.section = section;

}

public Long getMobile() {

return mobile;

}

public void setMobile(Long mobile) {

this.mobile = mobile;

}

public String getMailid() {

return mailid;

}

public void setMailid(String mailid) {

this.mailid = mailid;

}

public String getAddress() {

return address;

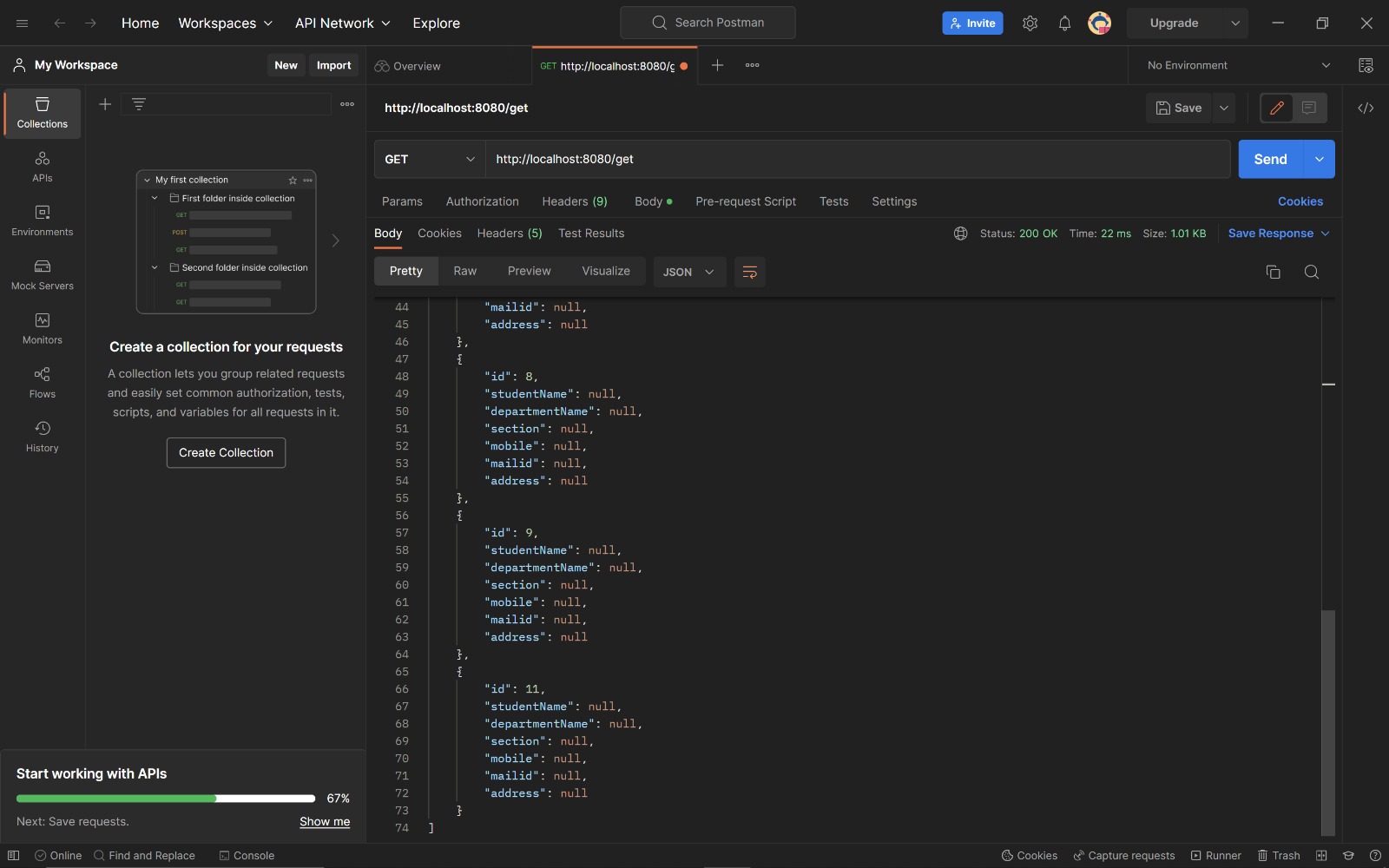
}

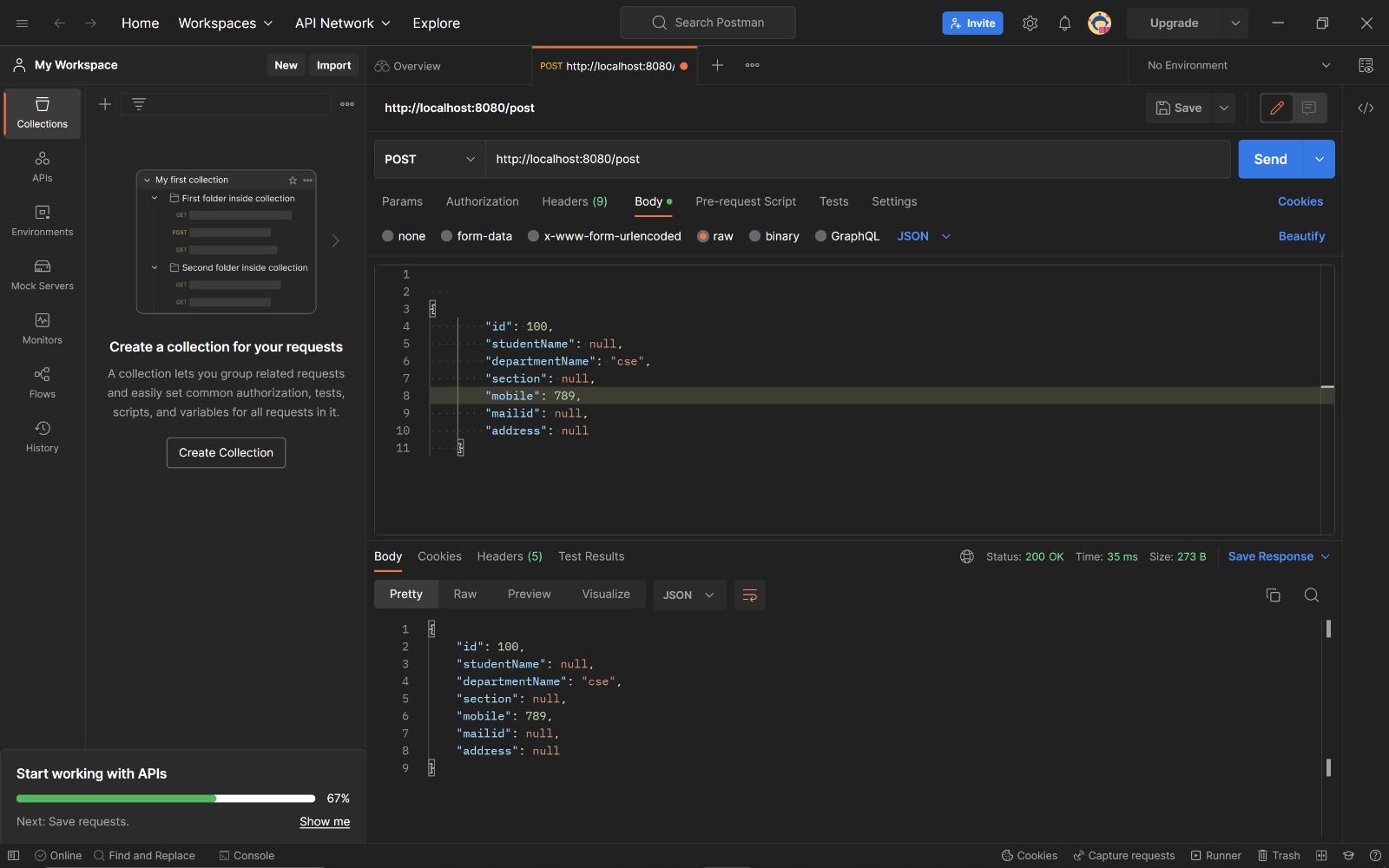
public void setAddress(String address) {

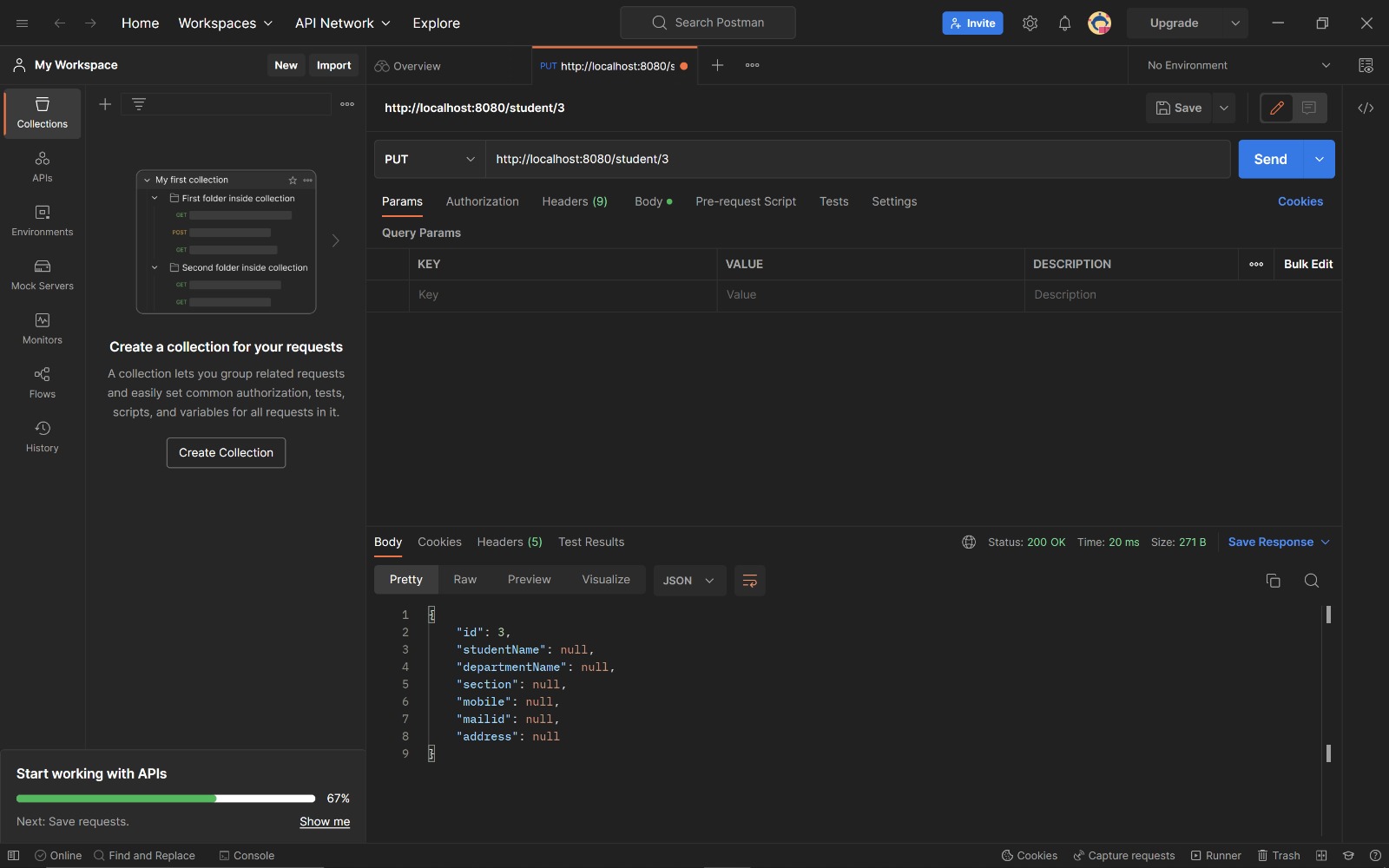
this.address = address;

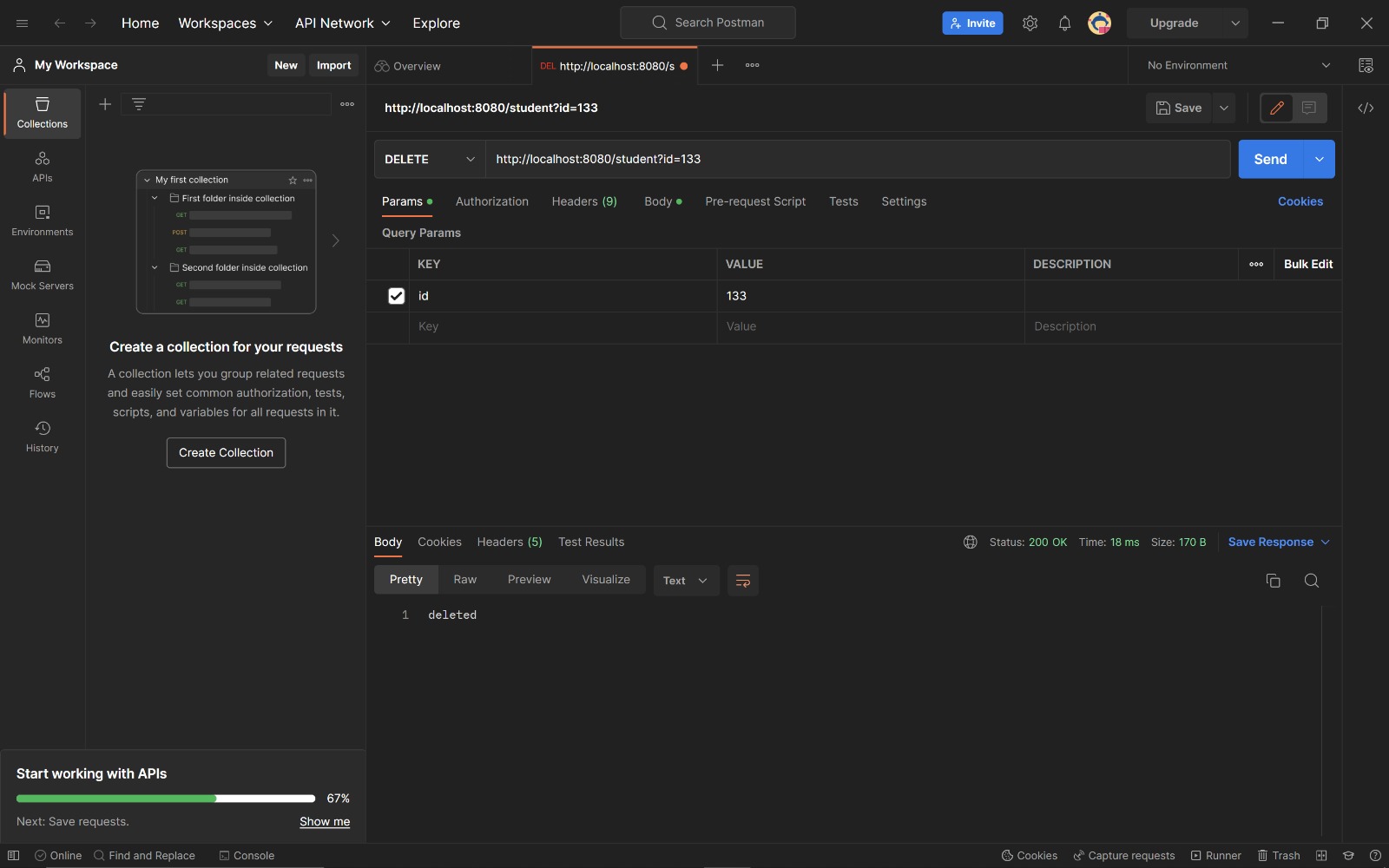
}

}

**Output :** 







**4.WELCOME**

**ApiResponse:**package com.example.demo;

public class ApiResponse {

private String message;

public ApiResponse(String message) {

this.message=message;

}

public String getMessage() {

return message;

}

}

**MessageController:**

package com.example.demo;

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

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

import com.fasterxml.jackson.core.JsonProcessingException;

import com.fasterxml.jackson.databind.ObjectMapper;

@RestController

public class messageController {

@GetMapping("/check")

public String checkApi() throws JsonProcessingException {

ApiResponse response =new ApiResponse("Hello welcome to this page");

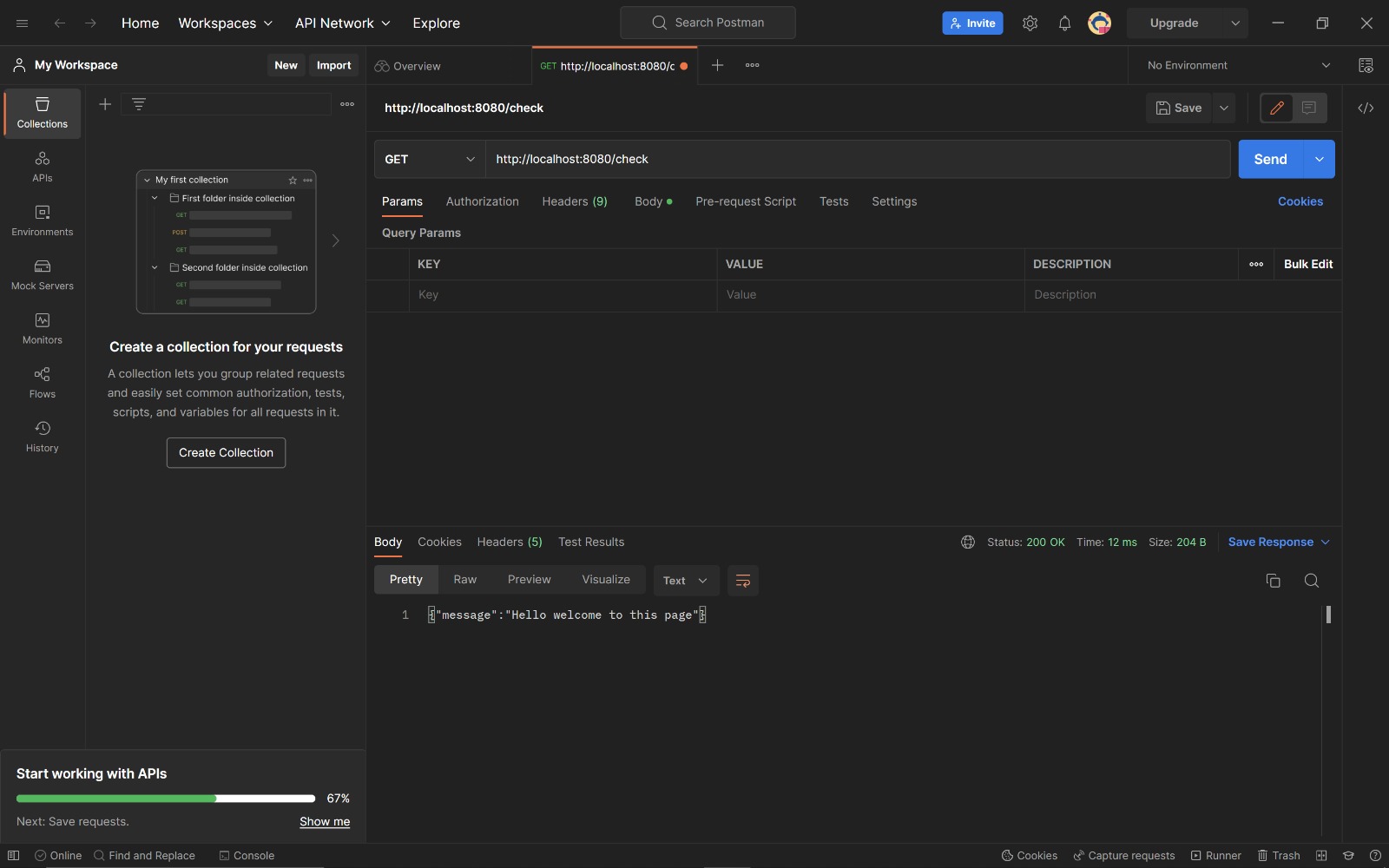
ObjectMapper obj=new ObjectMapper();

return obj.writeValueAsString(response);

}

}

**Output:**



**1.GET**

**Model:**package com.example.demo.Models;

import jakarta.persistence.Entity;

import jakarta.persistence.Id;

@Entity

public class Address

{

@Id

private String employeename;

private String address;

private int pincode;

public Address() {

super();

// TODO Auto-generated constructor stub

}

Address(String employeename, String address, int pincode) {

super();

this.employeename = employeename;

this.address = address;

this.pincode = pincode;

}

public String getEmployeename() {

return employeename;

}

public void setEmployeename(String employeename) {

this.employeename = employeename;

}

public String getAddress() {

return address;

}

public void setAddress(String address) {

this.address = address;

}

public int getPincode() {

return pincode;

}

public void setPincode(int pincode) {

this.pincode = pincode;

}

}

**Controller:**

package com.example.demo.Controllers;

import java.util.List;

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

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

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

import com.example.demo.Models.Address;

import com.example.demo.Repository.AddressRepository;

@RestController

public class ApiController

{

@Autowired

AddressRepository addrepo;

@GetMapping("/")

List<Address> getaddress()

{

return addrepo.findAll();

}

}

**Repository:**

package com.example.demo.Repository;

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

import org.springframework.stereotype.Repository;

import com.example.demo.Models.Address;

@Repository

public interface AddressRepository extends JpaRepository<Address,String>

{

}

**Application.property:**

spring.datasource.url=jdbc:mysql://localhost:3306/cia

spring.datasource.username=root

spring.datasource.password=12345678

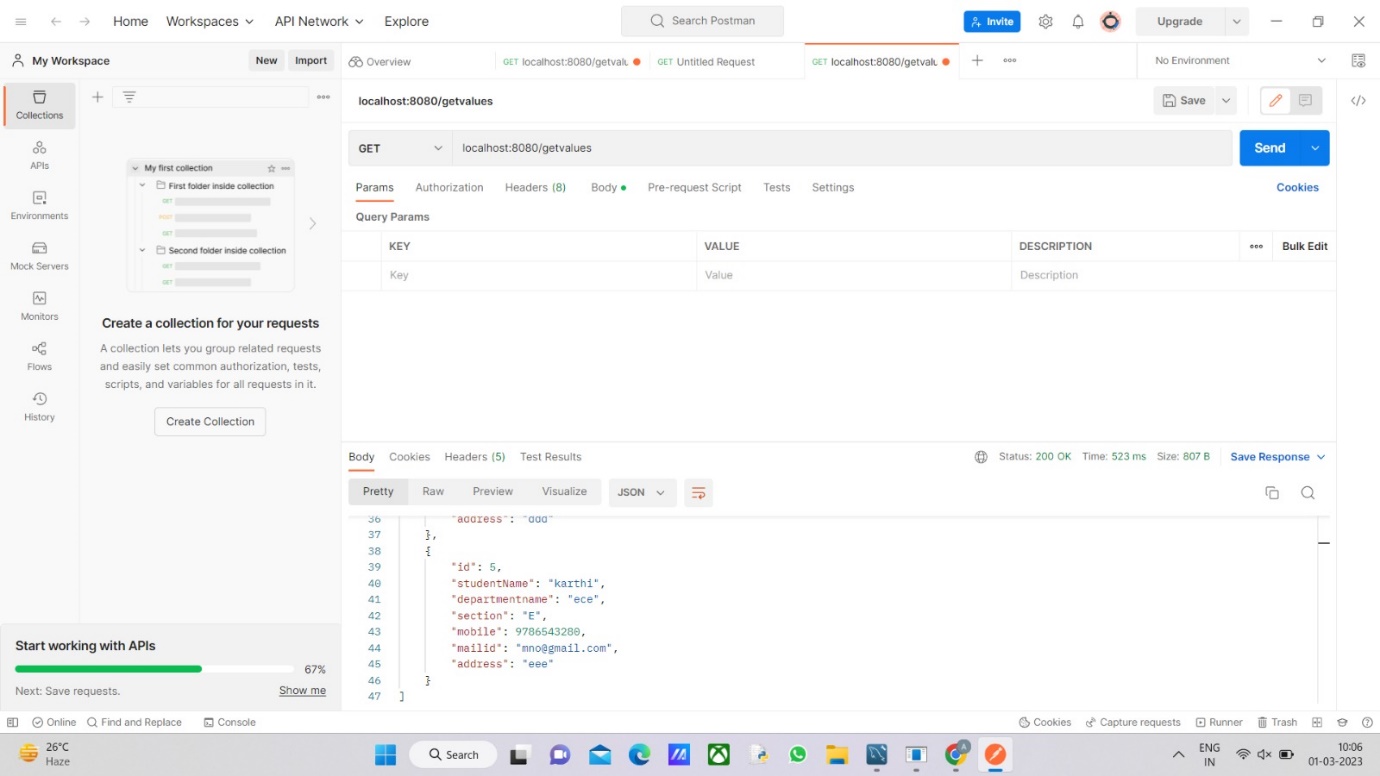
spring.jpa.database-platform=org.hibernate.dialect.MySQL8Dialect

spring.jpa.properties.hibernate.globally\_quoted\_identifiers=true

spring.jpa.generate-ddl=true

spring.jpa.hibernate.ddl-auto=update

**Output:**



**5.GET AND POST**

**Model:**

package com.example.demo;

public class Student {

int id;

String departmentName;

String section;

long mobile;

String mailid;

String address;

public Student(int id, String departmentName, String section, long mobile, String mailid, String address) {

super();

this.id = id;

this.departmentName = departmentName;

this.section = section;

this.mobile = mobile;

this.mailid = mailid;

this.address = address;

}

public Student() {

super();

// TODO Auto-generated constructor stub

}

public int getId() {

return id;

}

public void setId(int id) {

this.id = id;

}

public String getDepartmentName() {

return departmentName;

}

public void setDepartmentName(String departmentName) {

this.departmentName = departmentName;

}

public String getSection() {

return section;

}

public void setSection(String section) {

this.section = section;

}

public long getMobile() {

return mobile;

}

public void setMobile(long mobile) {

this.mobile = mobile;

}

public String getMailid() {

return mailid;

}

public void setMailid(String mailid) {

this.mailid = mailid;

}

public String getAddress() {

return address;

}

public void setAddress(String address) {

this.address = address;

}

}

**Controller:**

package com.example.demo;

import java.util.\*;

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

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

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

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

@RestController

public class StudentController {

@GetMapping("/home")

public String page()

{

return("Welcome to student list");

}

@GetMapping("/list")

public List<Student> getList(){

List<Student> detailsList = new ArrayList<>();

detailsList.add(new Student(1,"CSE","A",95,"727721eucs044@skcet.ac.in","SKCET"));

detailsList.add(new Student(2,"CSE","A",77,"727721eucs020@skcet.ac.in","SKCET"));

detailsList.add(new Student(3,"CSE","A",56,"727721eucs089@skcet.ac.in","SKCET"));

detailsList.add(new Student(4,"CSE","A",44,"727721eucs100@skcet.ac.in","SKCET"));

return detailsList;

}

@PostMapping("/post")

public List<Student> addStudent(@RequestBody Student newStudent) {

List<Student> detailsList = new ArrayList<>();

List<Student> detailsList = new ArrayList<>();

detailsList.add(new Student(1,"CSE","A",95,"727721eucs044@skcet.ac.in","SKCET"));

detailsList.add(new Student(2,"CSE","A",77,"727721eucs020@skcet.ac.in","SKCET"));

detailsList.add(new Student(3,"CSE","A",56,"727721eucs089@skcet.ac.in","SKCET"));

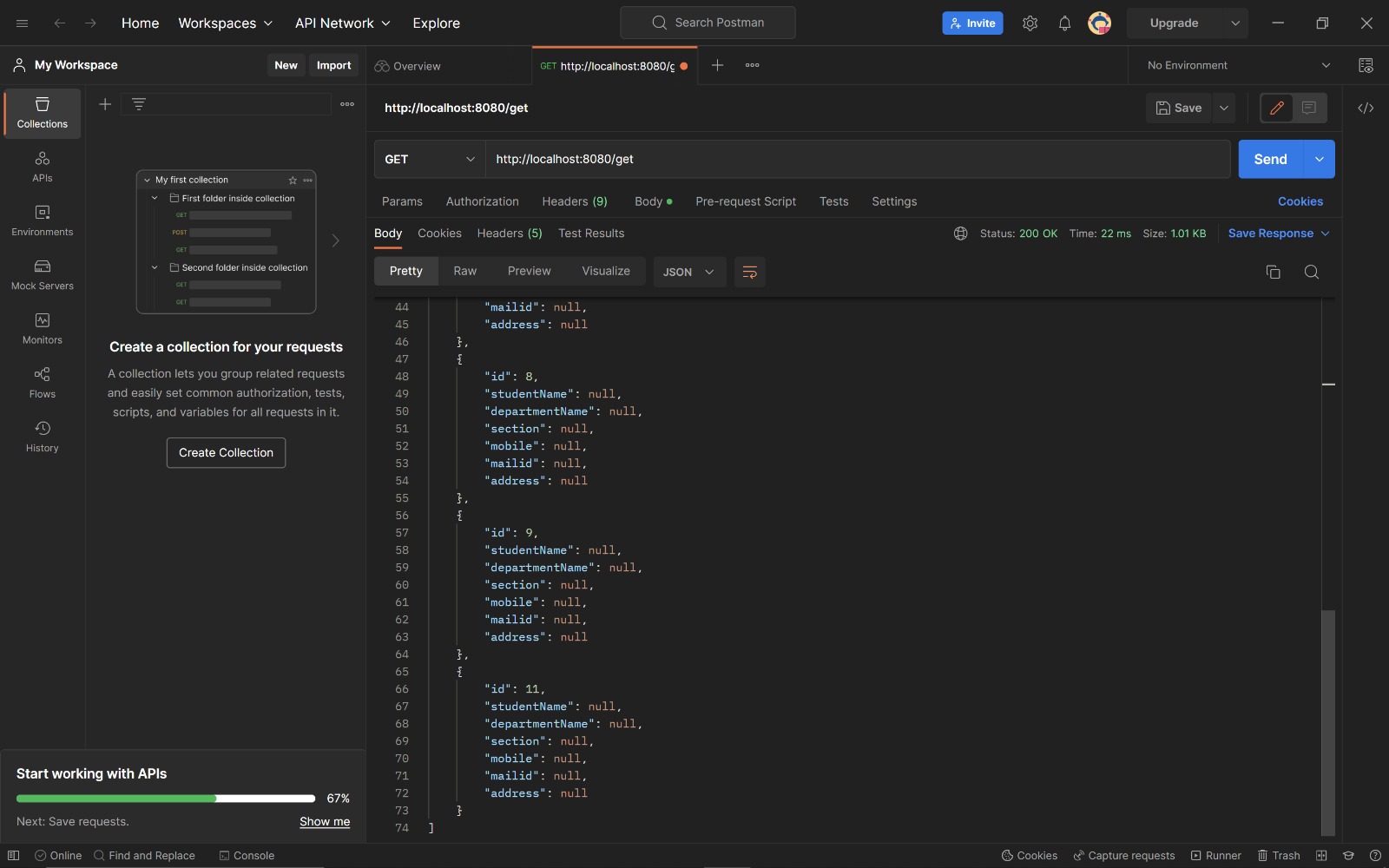
detailsList.add(new Student(4,"CSE","A",44,"727721eucs100@skcet.ac.in","SKCET"));

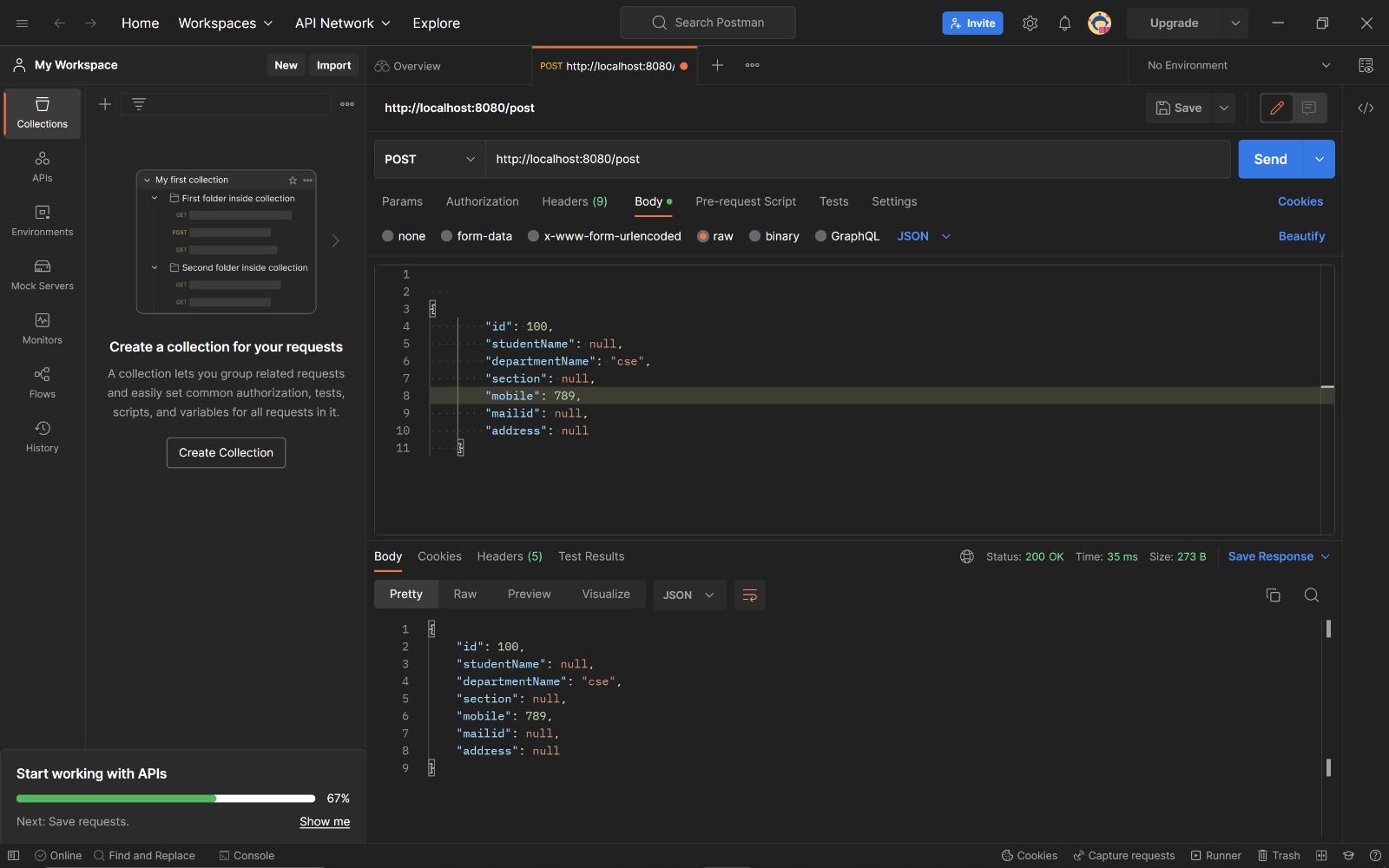
detailsList.add(newStudent);

return detailsList;

}

**Output:**





**3.GET-FAMILY**

**Controller:**

package com.example.springapp.Controllers;

import java.util.ArrayList;

import com.example.springapp.Models.Family;

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

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

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

@RestController

@RequestMapping("/family")

public class ApiController {

@GetMapping("/getFamilyDetails")

public ArrayList<Family> getFamilyDetails() {

ArrayList<Family> familyList = new ArrayList<>();

familyList.add(new Family("John Doe", 30, "Brother"));

familyList.add(new Family("Jane Doe", 25, "Sister"));

familyList.add(new Family("Mary Smith", 60, "Mother"));

return familyList;

}

}

**Model:**

package com.example.demo;

public class famil {

private String name;

private int age;

private String relation;

public famil(String name, int age, String relation) {

super();

this.name = name;

this.age = age;

this.relation = relation;

}

public famil() {

super();

// TODO Auto-generated constructor stub

}

public String getName() {

return name;

}

public void setName(String name) {

this.name = name;

}

public int getAge() {

return age;

}

public void setAge(int age) {

this.age = age;

}

public String getRelation() {

return relation;

}

public void setRelation(String relation) {

this.relation = relation;

}

}

**Output:**

