**Week 5 Microservices with API Gateway**  
**Creating Microservices for account and loan**  
In these hands-on exercises, we will create two microservices for a bank. One microservice for handing accounts and one for handling loans. Each microservice will be a specific independent Spring RESTful Webservice maven project having it's own pom.xml. The only difference is that, instead of having both account and loan as a single application, it is split into two different applications. These webservices will be a simple service without any backend connectivity.  
  
**Folder Setup:**

In D: drive created a folder with employee ID: D:\8007. Inside it, created a folder named microservices  
  
**Created a Controller class**

In src/main/java/com/cognizant/account, created a new Java class: AccountController.java

AccountController.java  
package com.cognizant.account;

import org.springframework.web.bind.annotation.\*;

@RestController

@RequestMapping("/accounts")

public class AccountController {

@GetMapping("/{number}")

public Account getAccount(@PathVariable String number) {

return new Account(number, "savings", 234343);

}

}

class Account {

private String number;

private String type;

private double balance;

public Account(String number, String type, double balance) {

this.number = number;

this.type = type;

this.balance = balance;

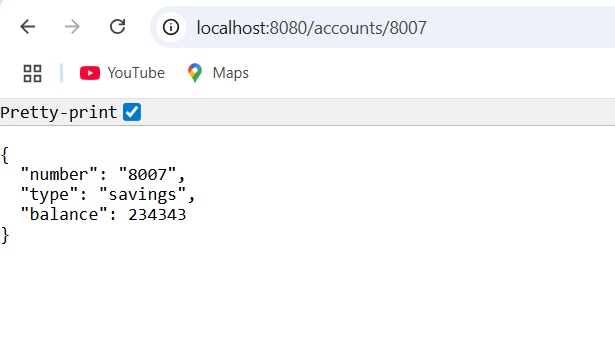
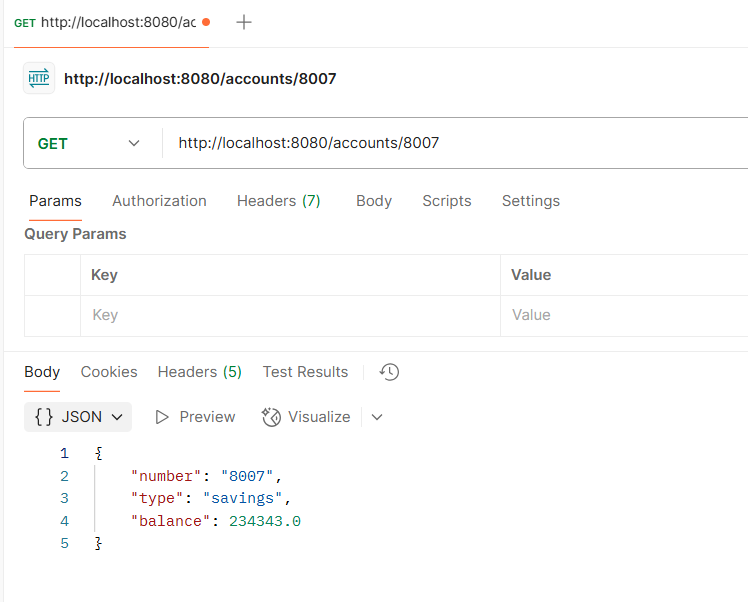
}

public String getNumber() { return number; }

public String getType() { return type; }

public double getBalance() { return balance; }

}  
**Output**

  
  
**Set a Different Port**

Open src/main/resources/application.properties

server.port=8081  
  
**Created a Controller class**

In src/main/java/com/cognizant/loan, created LoanController.java

LoanController.java  
package com.cognizant.loan;

import org.springframework.web.bind.annotation.\*;

@RestController

@RequestMapping("/loans")

public class LoanController {

@GetMapping("/{number}")

public Loan getLoan(@PathVariable String number) {

return new Loan(number, "car", 400000, 3258, 18);

}

}

class Loan {

private String number;

private String type;

private double loan;

private double emi;

private int tenure;

public Loan(String number, String type, double loan, double emi, int tenure) {

this.number = number;

this.type = type;

this.loan = loan;

this.emi = emi;

this.tenure = tenure;

}

public String getNumber() { return number; }

public String getType() { return type; }

public double getLoan() { return loan; }

public double getEmi() { return emi; }

public int getTenure() { return tenure; }

}

**Output**  
