WEEK-5

Creating Microservices for account and loan

1) Microservice for account

- Create a folder structure on the desktop with employeeID(123456) > microservices.
- Generate the maven application from the spring initializr with group name com.cognizant and artifact ID - account. Download the zip file and extract the folder.
- Place the account folder in the microservices folder.
- In the terminal, build the project using the command "mvn clean package".
- Write a controller class in the com.cognizant.account.controller package.

AccountController.java

```
package com.cognizant.account.controller;
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", 234343.0);
  static 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:



2) Microservice for loan

- Create a folder structure on the desktop with employeeID(123456) > microservices.
- Generate the maven application from the spring initializr with group name com.cognizant and artifact ID - loan. Download the zip file and extract the folder.
- Place the loan folder in the microservices folder.
- In the terminal, build the project using the command "mvn clean package".
- Write a controller class in the com.cognizant.loan.controller package.

LoanController.java

```
package com.cognizant.loan.controller;
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", 400000.0, 3258, 18);
  }
  static class Loan {
    private String number;
    private String type;
    private double loan;
    private int emi;
    private int tenure;
    public Loan(String number, String type, double loan, int 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 int getEmi() { return emi; }
    public int getTenure() { return tenure; }
 }
}
```

Output:

```
← → C ① localhost:8081/loans/A8732548956275

Pretty print □
{"number":"A8732548956275","type":"car","loan":400000.0,"emi":3258,"tenure":18}
```