rajashree - 8,9,10 - cnf

Program - 8 and 10

Step 1: Downlaod the required program 8 folder
opent the folder in terminal
create Dockerfile

FROM openjdk:17
COPY *.jar app.jar
CMD ["java","-jar","app.jar"]

docker build -t my_prg8:latest .

docker run -itp 8080:8080 my_prg8:latest

then open postman

POST: http://localhost:8080/person
{
"name": "zaiba",
"address": "bangalore-560076"
}

GET: http://localhost:8080/person
{
"name": "zaiba",
"address": "bangalore-560076"
}

DELETE: http://localhost:8080/person?name=zaiba

create kuber.yml

```
version: "3.8"
services:
 db:
  image: mysql:latest
  environment:
   DATABASE_PORT: 3306
   MYSQL_DATABASE: db_mca084
   MYSQL_ROOT_PASSWORD: mca084
```

```
  MYSQL_USERNAME: mca084
  MYSQL_PASSWORD: mca084
 networks:
  - default
app:
 image: prg9:latest
 ports:
 - 8080:8080
 environment:
  SPRING_DATASOURCE_URL: jdbc:mysql://172.16.34.43:3306/db_mca084
  SPRING_DATASOURCE_DRIVER_CLASS_NAME: com.mysql.cj.jdbc.Driver
  SPRING_DATASOURCE_USERNAME: mca084
  SPRING_DATASOURCE_PASSWORD: mca084
 depends_on:
  - db
 networks:
  - default
```

well cross check with - application.propertiesof jar with archive manager \

spring.datasource.url = jdbc:mysql://localhost:3306/student
spring.datasource.driverClassName = com.mysql.cj.jdbc.Driver
spring.datasource.username = root
spring.datasource.password = rvce
spring.jpa.show-sql = true
spring.jpa.hibernate.ddl-auto = update

minikube start --driver=docker

minikube delete(if cluster already existed)

then if its deleted then again, minikube start --driver=docker

eval $(minikube docker-env)

Again build image - docker build -t img_10:latest .
(make chnages in kuber.yml)

if kubectl not present install it - sudo snap install kubectl --classic

kubectl apply -f kuber.yml

minikube service myapp-service

then open postman

POST - http://192.168.49.2:31719/person
{
"name": "zaiba",
"address": "bangalore-560076"
}

GET - http://192.168.49.2:31719/person

DELETE - http://192.168.49.2:31719/person?name=zaiba

open another terminal and type - minikube dashboard

Program - 9

Step 1: Downlaod the required program 9 folder

then in the 9th program folder -
open the jar file, using open with Archive Manager, then BOOT-INF -> classes -> application.properties

spring.datasource.url = jdbc:mysql://localhost:3306/student
spring.datasource.driverClassName = com.mysql.cj.jdbc.Driver
spring.datasource.username = admin
spring.datasource.password = sql_zaiba
spring.jpa.show-sql = true
spring.jpa.hibernate.ddl-auto = update

here change the url to jdbc:mysql://172.16.34.41:3306/db_mca119, username and password to mca119

opent the folder in terminal
create Dockerfile

FROM openjdk:17
COPY *.jar app.jar
CMD ["java","-jar","app.jar"]

docker build -t my_prg9:latest .

create docker-compose.yml

version: "3.8"

```
services:
db:
image: mysql:latest
environment:
DATABASE_PORT: 3306
MYSQL_ROOT_PASSWORD: root
MYSQL_DATABASE: student
MYSQL_USER: admin
MYSQL_PASSWORD: sql_zaiba
networks:
- default
app:
image: my_prg9z1:latest # Replace this with the image name you created
ports:
- "8080:8080"
environment:
SPRING_DATASOURCE_URL: jdbc:mysql://db:3306/student
SPRING_DATASOURCE_DRIVER_CLASS_NAME: com.mysql.cj.jdbc.Driver
SPRING_DATASOURCE_USERNAME: admin
SPRING_DATASOURCE_PASSWORD: sql_zaiba
depends_on:
- db
networks:
- default
```

....here too make necessary chnages like username, apssword, link as per your changes made in application.properties

docker-compose up

docker compose up -d(in background)

docker-compose down

docker-compose up