**Performing CDC Using Debezium**

Docker Desktop is opened, and it is ensured that no containers are running. A screenshot showing no running containers is provided.

A screenshot of a computer

Description automatically generated

A Docker command is run to create a network called 'CDCFinalAssignment'. A screenshot showing the successful creation of the network is provided.

A screenshot of a computer screen

Description automatically generated

A folder named 'Module14FinalAssignment' is created, and 'Dockerfile' and 'employee.sql' files are added to it.

A screenshot of a computer

Description automatically generated

The command prompt is navigated to the 'Module14FinalAssignment' folder, and a Docker command is run to create the MySQL Docker image named 'mysqlmasterimg'.

A screenshot of a computer program

Description automatically generated

A MySQL Docker container named 'mysqlmasterdb' is created from the 'mysqlmasterimg' Docker image and associated with the 'CDCFinalAssignment' network.

A blue screen with white text

Description automatically generated

A screenshot of Docker Desktop showing the running 'mysqlmasterdb' MySQL Docker container is provided.

A screenshot of a computer

Description automatically generated

Code is downloaded and unzipped from the Debezium folder. A screenshot of the unzipped content from the Debezium folder is provided.

A screenshot of a computer

Description automatically generated

A Docker image is created using the Debezium Dockerfile. A screenshot showing the successful creation of the 'debeziumimg' image is provided.

A screenshot of a computer program

Description automatically generated

A Debezium Docker container is created for the assignment and associated with the 'CDCFinalAssignment' network. A screenshot showing the successful creation of the 'debeziumserver' Docker container and its association with the 'CDCFinalAssignment' network is provided.

A screen shot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

The Debezium server CLI is opened, and 'apt-get update' and 'apt-get install nano' commands are run.

A screenshot of a computer program

Description automatically generated

On the Debezium server, the 'DebeziumConnectorConfig.java' file is edited to replace the database name from 'customerdb' to 'employeedb'.

A computer screen shot of a computer program

Description automatically generated

From the '/tmp' folder, the 'mvn spring-boot:run' command is run to allow Debezium to start monitoring changes to the MySQL database. A screenshot showing the correct running of the application is provided, with 'FirstName=John' as the first entry in the Terminal window.

A screen shot of a computer program

Description automatically generated

To test the CDC, the 'mysqlmasterdb' CLI is opened, and a connection to the database is started using 'mysql -h localhost -u root -pMyNewPass employeedb'. A screenshot showing the successful start of the MySQL connection is provided.

A screenshot of a computer screen

Description automatically generated

From the Terminal window, an INSERT query is performed: 'INSERT INTO employeedb.employee VALUES (2, "Mary", "Doe", "4351234354", "mary@doe.com")'. A screenshot of the successfully executed INSERT query with 'FirstName=Mary' is provided.

A screenshot of a computer program

Description automatically generated

A screenshot showing the correct performance of the CDC is provided, with 'FirstName=Mary' as the first entry.

A computer screen shot of a blue screen

Description automatically generated