Week1_Implementation

Exercise 1 - Check the lab environment

Before you proceed with the assignment :

Start MySQL server.

```
start_mysql
```

Exercise 2 - Design the OLTP Database

Task 1 - Create a database.

Create a database named sales.

```
CREATE DATABASE sales;
```

Task 2 - Design a table named sales_data.

Design a table named sales_data based on the sample data given.

product_id	customer_id	price	quantity	timestamp
6739	76305	230	1	2020-09-05 16:20:03
7460	81008	1455	4	2020-09-05 16:20:04
6701	7556	1159	2	2020-09-05 16:20:05
8021	36492	3727	2	2020-09-05 16:20:06
6442	11282	4387	5	2020-09-05 16:20:07

Create the sales_data table in sales database.

```
use sales;
```

```
CREATE TABLE sales_data (
product_id INT NOT NULL,
customer_id INT NOT NULL,
price FLOAT NOT NULL,
quantity INT NOT NULL,
timestamp TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);

ALTER TABLE sales_data ADD PRIMARY KEY(product_id, customer_id);
```

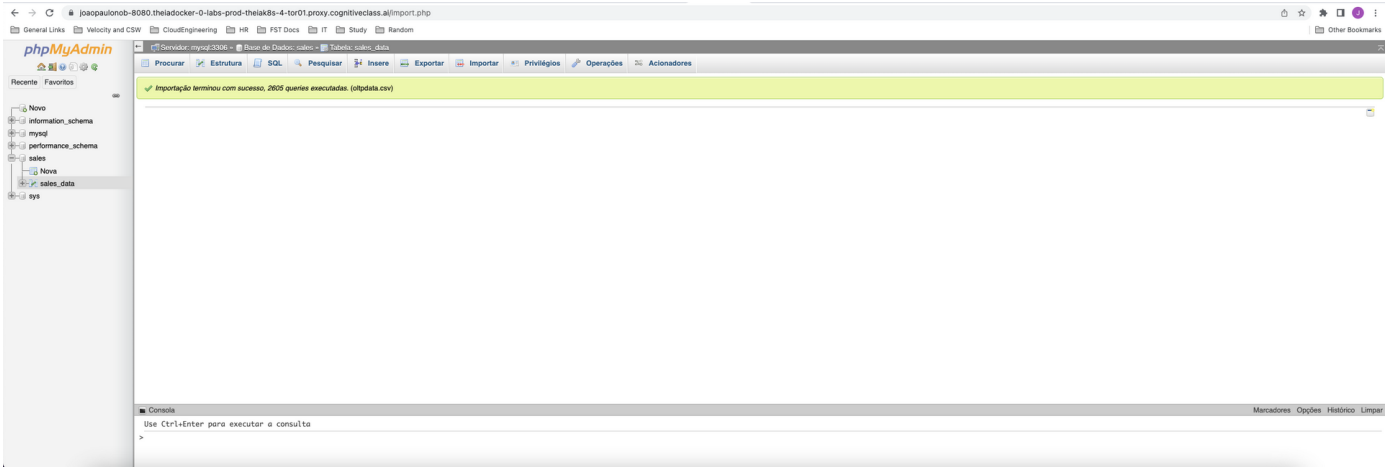
Exercise 3 - Load the Data

Task 3 - Import the data in the file oltpdata.csv

Download the file oltpdata.csv from https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBM-DB0321EN-SkillsNetwork/oltp/oltpdata.csv

Import the data from oltpdata.csv into sales_data table using phpMyAdmin.

```
wget https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBM-DB0321EN-SkillsNetwork/oltp/oltpdata.csv
```



Task 4 - List the tables in the database sales.

Take a screenshot of the command you used and the output.

```
SHOW TABLES;
```

Task 5. Write a query to find out the count of records in the tables sales_data.

```
SELECT COUNT(*) AS RECORD_COUNT FROM sales.sales_data;
```

Exercise 4 - Set up Admin tasks

Task 6 - Create an index

Create an index named ts on the timestamp field.

```
CREATE INDEX ts ON sales_data (timestamp);
SHOW INDEXES FROM sales_data;
```

Task 8 - Write a bash script to export data.

Write a bash script named `datadump.sh` that exports all the rows in the sales_data table to a file named sales_data.sql

```
#!/bin/bash
mysqldump --host=127.0.0.1 --port=3306 --user=root --password=`mypasshere` sales sales_data  > sales_data.sql
```