Lab 8

Self Practice Activity Solution

Task: To practice working with different types of keys in a MySQL database by creating tables and defining keys.

1. Create a new MySQL database named "inventory\_db."

CREATE DATABASE inventory\_db;

1. Create a table named "products" with the following columns:

USE inventory\_db;

CREATE TABLE products (

product\_id INT PRIMARY KEY,

product\_name VARCHAR(255),

category VARCHAR(50),

price DECIMAL(10, 2),

stock\_quantity INT

);

1. Create a table named "customers" with the following columns:

CREATE TABLE customers (

customer\_id INT PRIMARY KEY,

customer\_name VARCHAR(255),

email VARCHAR(255),

phone VARCHAR(20)

);

1. Create another table named "orders" with the following columns:

CREATE TABLE orders (

order\_id INT PRIMARY KEY,

customer\_id INT,

order\_date DATE,

FOREIGN KEY (customer\_id) REFERENCES customers(customer\_id)

);

1. Insert at least two records into each of the "products" and "customers" tables.

-- Insert records into the "products" table

INSERT INTO products (product\_id, product\_name, category, price, stock\_quantity)

VALUES

(1, 'Laptop', 'Electronics', 999.99, 10),

(2, 'Smartphone', 'Electronics', 599.99, 20);

-- Insert records into the "customers" table

INSERT INTO customers (customer\_id, customer\_name, email, phone)

VALUES

(1, 'John Doe', 'john@example.com', '123-456-7890'),

(2, 'Jane Smith', 'jane@example.com', '987-654-3210');

1. Insert at least one order into the "orders" table, referencing one of the customers.

-- Insert an order referencing a customer

INSERT INTO orders (order\_id, customer\_id, order\_date)

VALUES (1, 1, '2023-08-15');

This task allows you to practice creating tables, defining primary keys, foreign keys, and inserting records into MySQL tables. It demonstrates how different types of keys are used to establish relationships between tables in a database.