day 8

Assignment 1. create a product table with necessary attribute.

    write a query for table creation,

    insert the product data into the table.

    write a query to reterive all the product details

    write a query to reterive id and product name

    write a query to update and delete a product

Ans: Table Creation

```
CREATE TABLE product (
    id INT PRIMARY KEY AUTO_INCREMENT,
    name VARCHAR(255) NOT NULL,
    description TEXT,
    price DECIMAL(10, 2) NOT NULL,
    stock INT NOT NULL
);
```

Insert Product Data

```
INSERT INTO product (name, description, price, stock) VALUES
('Product A', 'Description for Product A', 19.99, 100),
('Product B', 'Description for Product B', 29.99, 150),
('Product C', 'Description for Product C', 39.99, 200),
('Product D', 'Description for Product D', 49.99, 250),
('Product E', 'Description for Product E', 59.99, 300);
```

Retrieve All Product Details

```
SELECT * FROM product;
```

Retrieve ID and Product Name

```
SELECT id, name FROM product;
```

Update a Product

To update the price and stock of a product with a specific ID:

```
UPDATE product
SET price = 24.99, stock = 120
WHERE id = 1;
```

Delete a Product

To delete a product with a specific ID:-

```
DELETE FROM product
WHERE id = 5;
```

Assignment2 : Write a Sql queries to Perform DDL operation for product entity. perform create table, drop table, alter table, rename table queries for the product entity.

Ans: Create Table

```
CREATE TABLE product (
    id INT PRIMARY KEY AUTO_INCREMENT,
    name VARCHAR(255) NOT NULL,
    description TEXT,
    price DECIMAL(10, 2) NOT NULL,
    stock INT NOT NULL
);
```

Drop Table

```
DROP TABLE IF EXISTS product;
```

Alter Table

Let's say we want to add a new column category to the product table and modify the description column to hold up to 500 characters.

```
-- Add a new column
ALTER TABLE product
ADD COLUMN category VARCHAR(100);

-- Modify an existing column
ALTER TABLE product
MODIFY COLUMN description VARCHAR(500);
```

Rename Table

Let's rename the product table to products.

```
RENAME TABLE product TO products;
```

Assignment 3:- write a query to find the product whose category is electronics

find all the product whose price range is between 5000 and 10000

display name and price from product table.

display all the electronic category item which has price more than 2000

sort the product based on price in descending order.

sort the product based on name.   count of product based on category.

display all the product except electronics category.

1.Find the product whose category is electronics

SELECT * FROM product WHERE category = 'electronics';

2. Find all the products whose price range is between 5000 and 10000

SELECT * FROM product WHERE price BETWEEN 5000 AND 10000;

3. Display name and price from the product table

SELECT name, price FROM product;

4. Display all the electronic category items which have a price more than 2000

SELECT * FROM product WHERE category = 'electronics' AND price > 2000;

5. Sort the products based on price in descending order

SELECT * FROM product ORDER BY price DESC;

6. Sort the products based on name

SELECT * FROM product ORDER BY name;

7. Count of products based on category

SELECT category, COUNT(*) AS product_count FROM product GROUP BY category;

8. Display all the products except the electronics category

SELECT * FROM product WHERE category <> 'electronics';