

SQL CRUD OPERATIONS

SQL Assignment: products Table

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Task 1: Create a Table

Create a table named `products` with the following columns:

- `product_id` (INT, Primary Key)
- `product_name` (VARCHAR)
- `category` (VARCHAR)
- `price` (DECIMAL)
- `stock_quantity` (INT)
- `added_date` (DATE)

Task 2: Insert Records

Insert at least 5 different products, each with a unique category and price range. Use realistic product names (e.g., headphones, mouse, laptop, etc.).

Task 3: Write Queries

1. List all products.
2. Display only `product_name` and `price`.
3. Find products with `stock_quantity` less than 10.
4. Find products with `price` between 500 and 2000.
5. Show products added after 2023-01-01.
6. List all products whose names start with 'S'.
7. Show all products that belong to either `Electronics` or `Furniture`.

Task 4: Update & Delete

1. Update the price of one product.
2. Increase stock of all products in a specific category by 5.
3. Delete one product based on its `product_id`.
4. Delete all products with `stock_quantity = 0`.

Task 1: Create a Table

```
create table products (  
    product_id INT PRIMARY KEY,  
    product_name VARCHAR(100),  
    category VARCHAR(100),  
    price DECIMAL(10, 2),  
    stock_quantity INT,  
    added_date DATE  
);
```

Task 2: Insert Records

```
INSERT INTO  
products(product_id,product_name,category,price,stock_quantity,added_date)  
VALUES(
```

(1, 'Smartphone', 'Electronics', 1499.99, 15, '2024-12-01'),
(2, 'Sofa', 'Furniture', 899.50, 5, '2023-06-20'),
(3, 'Headphones', 'Electronics', 500.00, 25, '2024-04-11'),
(4, 'Stove', 'Kitchen Appliances', 1800.00, 8, '2025-01-10'),
(5, 'Mouse', 'Electronics', 450.00, 0, '2022-11-05');

Task 3: Write Queries

1. List all products.

select * from products;

2. Display only product_name and price .

select product_name, price from products;

3. Find products with stock_quantity less than 10.

select * from products

where stock_quantity < 10;

4. Find products with price between 500 and 2000.

select * from products

where price between 500 and 2000;

5. Show products added after 2023-01-01 .

select * from products

where added_date > '2023-01-01';

6. List all products whose names start with 'S'.

select * from products

where product_name LIKE 'S%';

7. Show all products that belong to either Electronics or Furniture .

select * from products

where category IN ('Electronics', 'Furniture');

Task 4: Update & Delete

1. Update the price of one product.

update products

set price=300.00

where product_id=3;

2. Increase stock of all products in a specific category by 5.

update products

set stock_quantity = stock_quantity + 5

where category = 'Electronics';

3. Delete one product based on its product_id .

delete from products

where product_id=1;

4. Delete all products with stock_quantity = 0.

delete from products

where stock_quantity =0;