

Code examples from lectures

DML (for MyShop)

# DML (for MyShop)

#### 1. Insert a Product:

```
INSERT INTO myshop.products (name, quantity) VALUES ('Laptop', 15);
```

- INSERT INTO: Adds new rows to a table.
- Inserts a product named 'Laptop' with a quantity of 15 into the products table.

#### 2. Insert Another Product:

```
INSERT INTO myshop.products (name, quantity) VALUES ('Smartphone', 30);
```

• Inserts a product named 'Smartphone' with a quantity of 30 into the products table.

# 3. Insert a Product with Default Quantity:

```
INSERT INTO myshop.products (name) VALUES ('Headphones');
```

• Inserts a product named 'Headphones' with the default quantity of 0 into the products table.

# 4. Insert a Category:

```
INSERT INTO myshop.categories (name) VALUES ('Electronics');
```

• Inserts a category named 'Electronics' into the categories table.

#### 5. Insert Another Category:

```
INSERT INTO myshop.categories (name) VALUES ('Accessories');
```

• Inserts a category named 'Accessories' into the categories table.

### 6. Insert a Client:

```
INSERT INTO myshop.clients (name) VALUES ('Mykola');
```

• Inserts a client named 'Mykola' into the clients table.

#### 7. Insert Another Client:

```
INSERT INTO myshop.clients (name) VALUES ('Patron');
```

• Inserts a client named 'Patron' into the clients table.

# 8. Insert an Order Using a SELECT to Get Client ID:

```
INSERT INTO myshop.orders (order_id, client_id)
SELECT 1, client_id FROM myshop.clients WHERE name = 'Patron';
```

- **SELECT**: Retrieves data from a table.
- o Inserts an order with order id 1 for the client named 'Patron' into the orders table.

## 9. Insert an Order Using a Known Client ID:

```
INSERT INTO myshop.orders (order_id, client_id)
VALUES (2, 1);
```

• Inserts an order with order\_id 2 for the client with client\_id 1 into the orders table.

## 10. Insert Product-Category Association Using a SELECT:

```
INSERT INTO myshop.product_category (product_id, category_id)
SELECT p.product_id, c.category_id
FROM myshop.products AS p, myshop.categories AS c
WHERE p.name = 'Laptop' AND c.name = 'Electronics';
```

• Inserts an association between the product 'Laptop' and the category 'Electronics' into the product\_category table.

## 11. Insert Product-Category Association Using Known IDs:

```
INSERT INTO myshop.product_category (product_id, category_id) VALUES (2,
2);
```

• Inserts an association between the product with product\_id 2 and the category with category\_id 2 into the product\_category table.

# 12. Insert Ordered Product Using a SELECT:

```
INSERT INTO myshop.ordered_products (product_id, order_id, quantity)
SELECT product_id, 1, 10 FROM myshop.products WHERE name = 'Smartphone';
```

o Inserts an ordered product with product\_id for 'Smartphone', order\_id 1, and quantity 10 into the ordered\_products table.

# 13. Insert Ordered Product Using Known IDs:

```
INSERT INTO myshop.ordered_products (product_id, order_id, quantity)
VALUES (1, 1, 5);
```

o Inserts an ordered product with product\_id 1, order\_id 1, and quantity 5 into the ordered\_products table.

## 14. Update Product Quantity:

```
UPDATE myshop.products SET quantity = quantity + 10 WHERE name = 'Laptop';
```

- **UPDATE**: Modifies existing rows in a table.
- Increases the quantity of the product 'Laptop' by 10 in the products table.

# 15. **Change Product Name:**

```
UPDATE myshop.products SET name = 'Portable Speaker' WHERE name =
'Headphones';
```

• Changes the name of the product 'Headphones' to 'Portable Speaker' in the products table.

## 16. Change Category Name:

```
UPDATE myshop.categories SET name = 'Electronic Devices' WHERE name =
'Electronics';
```

• Changes the name of the category 'Electronics' to 'Electronic Devices' in the categories table.

# 17. Update Client Name:

```
UPDATE myshop.clients SET name = 'Dog Patron' WHERE name = 'Patron';
```

• Changes the name of the client 'Patron' to 'Dog Patron' in the clients table.

# 18. Change Client ID for an Order:

```
UPDATE myshop.orders SET client_id = (SELECT client_id FROM myshop.clients
WHERE name = 'Mykola') WHERE order_id = 1;
```

• Changes the client\_id of the order with order\_id 1 to the client\_id of 'Mykola' in the orders table.

## 19. **Update Order Date:**

```
UPDATE myshop.orders SET order_date = '2024-01-01' WHERE order_id = 2;
```

• Changes the order\_date of the order with order\_id 2 to '2024-01-01' in the orders table.

## 20. Change Category Associated with a Product:

```
UPDATE myshop.product_category
SET category_id = (SELECT category_id FROM myshop.categories WHERE name =
'Accessories')
WHERE product_id = (SELECT product_id FROM myshop.products WHERE name =
'Laptop');
```

Changes the category\_id associated with the product 'Laptop' to the category\_id of 'Accessories' in the product\_category table.

## 21. Update Quantity of a Product in an Order:

```
UPDATE myshop.ordered_products SET quantity = 15 WHERE order_id = 1 AND
product_id = (SELECT product_id FROM myshop.products WHERE name =
'Smartphone');
```

Updates the quantity to 15 for the product 'Smartphone' in the order with order\_id 1 in the ordered\_products table.

#### 22. Link a Different Product to an Order:

```
UPDATE myshop.ordered_products
SET product_id = (SELECT product_id FROM myshop.products WHERE name =
'Portable Speaker')
WHERE order_id = 1 AND product_id = (SELECT product_id FROM
myshop.products WHERE name = 'Laptop');
```

• Changes the product\_id from 'Laptop' to 'Portable Speaker' in the order with order id 1 in the ordered products table.