

WEEK 2

TRIGGERS

TASK 1:

```
mysql> CREATE DATABASE FoodOrderDB;
Query OK, 1 row affected (0.06 sec)

mysql> USE FoodOrderDB;
Database changed
mysql> CREATE TABLE driver (
->     driver_id INT PRIMARY KEY AUTO_INCREMENT,
->     name VARCHAR(50),
->     otp INT
-> ).
```

```
mysql> DELIMITER $$

mysql>
mysql> CREATE TRIGGER driver_otp_check
-> BEFORE INSERT ON driver
-> FOR EACH ROW
-> BEGIN
->     IF NEW.otp IS NULL THEN
->         SIGNAL SQLSTATE '45000'
->         SET MESSAGE_TEXT = 'OTP is required for driver entry';
->     END IF;
-> END$$
Query OK, 0 rows affected (0.04 sec)

mysql>
mysql> DELIMITER ;
mysql>
```

TASK 2:

```

mysql> DELIMITER ;
mysql> CREATE TABLE dish (
    ->     dish_id INT PRIMARY KEY AUTO_INCREMENT,
    ->     dish_name VARCHAR(50),
    ->     price DECIMAL(8,2)
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql>
mysql> CREATE TABLE orders (
    ->     order_id INT PRIMARY KEY AUTO_INCREMENT,
    ->     total_price DECIMAL(10,2) DEFAULT 0
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql>
mysql> CREATE TABLE order_items (
    ->     item_id INT PRIMARY KEY AUTO_INCREMENT,
    ->     order_id INT,
    ->     dish_id INT,
    ->     quantity INT,
    ->     FOREIGN KEY (order_id) REFERENCES orders(order_id),
    ->     FOREIGN KEY (dish_id) REFERENCES dish(dish_id)
    -> );
Query OK, 0 rows affected (0.08 sec)

mysql> |

```

```

mysql> DELIMITER $$

mysql>
mysql> CREATE TRIGGER update_order_total
-> AFTER INSERT ON order_items
-> FOR EACH ROW
-> BEGIN
->     DECLARE dish_price DECIMAL(8,2);
->
->     SELECT price INTO dish_price
->     FROM dish
->     WHERE dish_id = NEW.dish_id;
->
->     UPDATE orders
->     SET total_price = total_price + (dish_price * NEW.quantity)
->     WHERE order_id = NEW.order_id;
-> END$$
Query OK, 0 rows affected (0.04 sec)

mysql>
mysql> DELIMITER ;
mysql>

```

TASK 3:

```

mysql>
mysql> DELIMITER ;
mysql> CREATE TABLE customer (
    ->     customer_id INT PRIMARY KEY AUTO_INCREMENT,
    ->     name VARCHAR(50),
    ->     created_at TIMESTAMP
    -> );
Query OK, 0 rows affected (0.04 sec)

mysql> DELIMITER $$

mysql>
mysql> CREATE TRIGGER set_created_at
    -> BEFORE INSERT ON customer
    -> FOR EACH ROW
    -> BEGIN
    ->     SET NEW.created_at = CURRENT_TIMESTAMP;
    -> END$$
Query OK, 0 rows affected (0.01 sec)

mysql>
mysql> DELIMITER ;
mysql> |

```

TASK 4:

```

mysql>
mysql> DELIMITER ;
mysql> CREATE TABLE employee (
    ->     emp_id INT PRIMARY KEY AUTO_INCREMENT,
    ->     emp_name VARCHAR(50),
    ->     salary DECIMAL(10,2)
    -> );
Query OK, 0 rows affected (0.05 sec)

mysql> DELIMITER $$

mysql>
mysql> CREATE TRIGGER salary_check
    -> BEFORE INSERT ON employee
    -> FOR EACH ROW
    -> BEGIN
    ->     IF NEW.salary < 0 THEN
    ->         SIGNAL SQLSTATE '45000'
    ->         SET MESSAGE_TEXT = 'Salary cannot be negative';
    ->     END IF;
    -> END$$
Query OK, 0 rows affected (0.03 sec)

mysql>
mysql> DELIMITER ;
mysql> |

```

TASK 5:

```
mysql> DELIMITER $$  
mysql>  
mysql> CREATE TRIGGER employee_update_audit  
-> AFTER UPDATE ON employee  
-> FOR EACH ROW  
-> BEGIN  
->     INSERT INTO employee_audit  
->     (  
->         emp_id,  
->         old_name,  
->         old_salary,  
->         updated_at  
->     )  
->     VALUES  
->     (  
->         OLD.emp_id,  
->         OLD.emp_name,  
->         OLD.salary,  
->         CURRENT_TIMESTAMP  
->     );  
-> END$$  
Query OK, 0 rows affected (0.03 sec)  
  
mysql>  
mysql> DELIMITER ;  
mysql> UPDATE employee  
-> SET salary = salary + 5000  
-> WHERE emp_id = 1;  
Query OK, 0 rows affected (0.03 sec)  
Rows matched: 0  Changed: 0  Warnings: 0  
  
mysql> SELECT * FROM employee_audit;  
Empty set (0.00 sec)
```