

Vignesh kumar S

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TRIGGERS AND VIEWS:

-- Use the new database PersonalDetails

USE PersonalDetails;

-- Creating WORKER Table and GROCERY Table

CREATE TABLE IF NOT EXISTS WORKER (

empId INT PRIMARY KEY,

empName VARCHAR(45),

empSalary INT,

empDomain VARCHAR(30),

empAge INT,

JoiningDate DATE

);

CREATE TABLE IF NOT EXISTS GROCERY (

productId INT PRIMARY KEY,

productName VARCHAR(30),

productQty INT,

price INT,

expireDate DATE

);

-- Sample Insertion into WORKER Table

INSERT INTO WORKER (empId, empName, empSalary, empDomain, empAge, JoiningDate)

VALUES

(20, 'Vignesh Kumar S', 25000, 'RPA', 23, '2019-12-21'),

(17, 'Arjun', 18000, 'Mech', 24, '2018-08-12'),

(10, 'Rajesh', 32000, 'DA', 27, '2017-07-12'),

(13, 'Suresh', 22000, 'DAT', 29, '2016-05-10'),

(15, 'Karthik', 35000, 'AI', 30, '2015-04-09');

-- Sample Insertion into GROCERY Table

INSERT INTO GROCERY (productId, productName, productQty, price, expireDate)

VALUES

(10, 'Apple', 50, 120, '2023-12-21'),

(11, 'Banana', 100, 40, '2024-05-18'),

(12, 'Carrot', 60, 60, '2024-06-10'),

(13, 'Tomato', 80, 30, '2024-01-22');

-- ----- TRIGGER for WORKER Table -----

-- Trigger to log changes when the JoiningDate of a worker is updated or inserted

DELIMITER //

CREATE TRIGGER trigger_work_JoiningDate

AFTER INSERT OR UPDATE ON WORKER

FOR EACH ROW

BEGIN

INSERT INTO worker_log (log_time, empld, empName, joining_date)

VALUES (CURRENT_DATE(), NEW.empld, NEW.empName, NEW.JoiningDate);

END //

DELIMITER ;

-- ----- TRIGGER for GROCERY Table -----

-- Trigger to log changes when the expireDate of a product is updated

DELIMITER //

CREATE TRIGGER trigger_grocery_expiry

AFTER UPDATE ON GROCERY

FOR EACH ROW

BEGIN

INSERT INTO grocery_log (log_time, productId, productName, expireDate)

VALUES (CURRENT_DATE(), NEW.productId, NEW.productName, NEW.expireDate);

END //

DELIMITER ;

-- ----- VIEWS -----

-- View to get the worker with the earliest joining date

```
CREATE VIEW WorkerWithEarliestJoining AS  
SELECT *  
FROM WORKER  
WHERE JoiningDate = (SELECT MIN(JoiningDate) FROM WORKER);
```

```
SELECT * FROM WorkerWithEarliestJoining;
```

```
-- ----- STORED PROCEDURE for GROCERY -----
```

```
DELIMITER //
```

```
CREATE PROCEDURE getProductById(IN id INT)  
BEGIN  
    SELECT * FROM GROCERY  
    WHERE productId = id;  
END //
```

```
DELIMITER ;
```

```
CALL getProductById(12);
```

```
DELIMITER //
```

```
CREATE PROCEDURE getAllProducts()  
BEGIN  
    SELECT * FROM GROCERY;
```

END //

DELIMITER ;

CALL getAllProducts();

DELIMITER //

CREATE PROCEDURE getExpiredProducts(IN year INT)

BEGIN

SELECT * FROM GROCERY

WHERE YEAR(expireDate) = year;

END //

DELIMITER ;

CALL getExpiredProducts(2023);

-- Updating grocery expiration dates

UPDATE GROCERY SET expireDate = '2024-12-21' WHERE productId = 10;

UPDATE GROCERY SET expireDate = '2024-08-12' WHERE productId = 11;

UPDATE GROCERY SET expireDate = '2024-07-12' WHERE productId = 12;

SELECT * FROM GROCERY;

-- Selecting from WORKER table to verify the existing records

```
SELECT * FROM WORKER;
```

```
-- Select grocery products with price less than 100
```

```
SELECT * FROM GROCERY WHERE price < 100;
```