|  |  |  |
| --- | --- | --- |
| i have two table one is material\_table | |  |
| material\_id | quantity available | expiry\_date |
| 1 | 100 | 01-12-2024 |
| 1 | 50 | 02-12-2024 |
| 2 | 33 | 01-12-2024 |
| 2 | 32 | 02-12-2024 |
| 3 | 64 | 02-12-2024 |

and other is

|  |  |
| --- | --- |
| ordered\_qty | |
| material\_id | quantity\_to\_be\_used |
| 1 | 105 |
| 2 | 35 |
| 3 | 33 |

write a procedure in mysql to get result set like as quantity is getting subtracted on fifo basis on basis of expiry date

|  |  |  |
| --- | --- | --- |
| result |  |  |
| material\_id | available\_inventory | expiry\_date |
| 1 | 45 | 02-12-2024 |
| 2 | 30 | 02-12-2024 |
| 3 | 31 | 02-12-2024 |

DELIMITER $$

CREATE PROCEDURE update\_inventory()

BEGIN

DECLARE done INT DEFAULT 0;

DECLARE material INT;

DECLARE qty\_to\_use INT;

DECLARE available\_qty INT;

DECLARE expiry\_date DATE;

-- Create a temporary table to store the result

CREATE TEMPORARY TABLE IF NOT EXISTS temp\_inventory (

material\_id INT,

available\_inventory INT,

expiry\_date DATE

);

-- Create a cursor to loop over the ordered\_qty table

DECLARE cur CURSOR FOR

SELECT material\_id, quantity\_to\_be\_used

FROM ordered\_qty;

DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;

-- Open the cursor

OPEN cur;

-- Loop over each material in ordered\_qty

read\_loop: LOOP

FETCH cur INTO material, qty\_to\_use;

IF done THEN

LEAVE read\_loop;

END IF;

-- Process the material based on FIFO

SET available\_qty = qty\_to\_use;

-- Create a cursor to loop over the material\_table based on expiry\_date

DECLARE material\_cursor CURSOR FOR

SELECT quantity\_available, expiry\_date

FROM material\_table

WHERE material\_id = material

ORDER BY expiry\_date; -- FIFO (earliest expiry date first)

OPEN material\_cursor;

-- Loop through material quantities and subtract from the order

read\_material\_loop: LOOP

FETCH material\_cursor INTO available\_qty, expiry\_date;

IF done THEN

LEAVE read\_material\_loop;

END IF;

-- If there is still quantity to use, subtract it based on FIFO

IF available\_qty > 0 AND qty\_to\_use > 0 THEN

IF available\_qty >= qty\_to\_use THEN

-- If the available quantity is greater than or equal to required, subtract it

SET available\_qty = available\_qty - qty\_to\_use;

SET qty\_to\_use = 0; -- All required quantity used

ELSE

-- If available quantity is less, use all of it and reduce the required quantity

SET qty\_to\_use = qty\_to\_use - available\_qty;

SET available\_qty = 0;

END IF;

END IF;

-- Insert the remaining inventory into the temporary table

INSERT INTO temp\_inventory (material\_id, available\_inventory, expiry\_date)

VALUES (material, available\_qty, expiry\_date);

END LOOP;

CLOSE material\_cursor;

END LOOP;

CLOSE cur;

-- Store the result in the final inventory\_result table

CREATE TABLE IF NOT EXISTS inventory\_result (

material\_id INT,

available\_inventory INT,

expiry\_date DATE

);

-- Insert final results from temporary table into inventory\_result

INSERT INTO inventory\_result (material\_id, available\_inventory, expiry\_date)

SELECT material\_id, available\_inventory, expiry\_date

FROM temp\_inventory;

-- Cleanup temporary table

DROP TEMPORARY TABLE IF EXISTS temp\_inventory;

END $$

DELIMITER ;