```sql
CREATE TRIGGER A9_UPDATE_PRODUCT_QOH_TRIGGER ON LGLINE

AFTER INSERT, DELETE, UPDATE

AS

BEGIN

        DECLARE         @PROD_SKU NVARCHAR(15)

        DECLARE         @TOTAL INT

        IF      (EXISTS(SELECT  *

                        FROM   INSERTED))


BEGIN

        DECLARE         INSERTED_CURSOR CURSOR FOR

        SELECT  PROD_SKU, SUM(LINE_QTY) AS TOTAL

        FROM   INSERTED

        GROUP BY PROD_SKU


OPEN    INSERTED_CURSOR

FETCH   NEXT FROM INSERTED_CURSOR

            INTO @PROD_SKU, @TOTAL


WHILE  (@@FETCH_STATUS = 0)


BEGIN

        UPDATE          LGPRODUCT

        SET PROD_QOH = PROD_QOH - @TOTAL --ordering more = inventory decreases

        WHERE PROD_SKU = @PROD_SKU

        FETCH   NEXT FROM INSERTED_CURSOR

                    INTO @PROD_SKU, @TOTAL

        END

        CLOSE INSERTED_CURSOR
```

```
        DEALLOCATE INSERTED_CURSOR
END



IF(EXISTS (SELECT *
            FROM DELETED))
BEGIN
        DECLARE DELETED_CURSOR CURSOR FOR
        SELECT  PROD_SKU, SUM(LINE_QTY) AS TOTAL
        FROM   DELETED
        GROUP BY PROD_SKU


OPEN    DELETED_CURSOR
FETCH   NEXT FROM DELETED_CURSOR
            INTO @PROD_SKU, @TOTAL


WHILE(@@FETCH_STATUS = 0)

BEGIN
        UPDATE       LGPRODUCT
        SET          PROD_QOH = PROD_QOH + @TOTAL --products returned = inventory increases
        WHERE PROD_SKU = @PROD_SKU
        FETCH   NEXT FROM DELETED_CURSOR
                INTO @PROD_SKU, @TOTAL
        END
        CLOSE DELETED_CURSOR
        DEALLOCATE DELETED_CURSOR
END
```

```
END

GO




--Test Data

-- Shows the INV_NUM = 1013, LINE_NUM = 3, PROD_SKU = 8207-YYG, LINE_QTY = 4, and  LINE_PRICE =
34.49

SELECT  *

FROM   LGLINE

WHERE INV_NUM = 1013 AND

                PROD_SKU = '8207-YYG'


-- Original PROD_QOH for 8207-YYG is 4

-- updated PROD_QOH will subtract 4

UPDATE          LGLINE

SET             LINE_QTY = LINE_QTY + 4

WHERE INV_NUM = 1013 AND

                PROD_SKU = '8207-YYG'


-- Shows the results of the update in the LGPRODUCT table due to the Trigger

SELECT  *

FROM   LGPRODUCT

WHERE PROD_SKU = '8207-YYG'


-- Reverses the previous update

-- updated PROD_QOH will increase by 4

UPDATE          LGLINE

SET             LINE_QTY = LINE_QTY - 4

WHERE INV_NUM = 1013 AND
```

PROD_SKU = '8207-YYG'

-- Shows the results of the update in the LGPRODUCT table due to the Trigger

SELECT *

FROM   LGPRODUCT

WHERE PROD_SKU = '8207-YYG'

-- Deletes this record

DELETE

FROM   LGLINE

WHERE INV_NUM = 285 AND

                PROD_SKU = '4241-UOF'

--INV_NUM = 285, LINE_NUM = 2, PROD_SKU= 4241-UOF, LINE_QTY = 1, LINE_PRICE = 13.59

-- Original PROD_QOH is 49

-- Checks to see that the deleted item was deleted

-- PROD_QOH is now 50, which shows that the inventory was increased since the invoice was deleted

SELECT *

FROM   LGPRODUCT

WHERE PROD_SKU = '4241-UOF'

-- Inserts the deleted record back into the database

INSERT INTO LGLINE

VALUES(285, 2, '4241-UOF', 1, 13.59)